
14 February 1996

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Auditor-General for Australia
A FOCUS ON ADDING VALUE

Our vision is:

*to be valued by the Parliament, the Community and Commonwealth Entities as a major contributor to achieving excellence in public sector administration and accountability.*

In short, we see our business as being more than auditing per se. In that sense, it is very much an outcomes oriented vision which I have chosen to short-hand as adding value.

Therefore the first point I want to make about the audit relationship in regard to systems management and control is that our focus will be primarily on working co-operatively with you to improve your financial management performance (Part I). In this connection I will talk about how the ANAO will be taking a higher profile in across-the-service developments, for example, in resource management (Part II). Importantly, this is highly dependent on how well we individually and collectively manage our information for better performance, recognising the significant impact this can have on how we do our business (Part III). I will then discuss major aspects of the financial management environment which will affect the way in which the audit relationship develops in the future (Part IV). Not surprisingly, a shared concern will be assurance about security and privacy issues (Part V). I also will touch on the complementary relationship with your internal audit and evaluation processes (Part VI). And, finally, I will provide a broad overview of factors that impact on the relationship from an ANAO perspective (Part VII).

The Audit Act and other Commonwealth Acts provide that the Auditor-General's responsibility, in essence, is to:

- audit the financial statements of Commonwealth owned or controlled public sector entities, whether they be departments, statutory authorities or companies; with one or two exceptions, the financial statement audit mandate of the Auditor-General currently applies to all Commonwealth owned or controlled entities, whatever their legal form; and

- to conduct efficiency and project performance audits of all public sector entities other than Government Business Enterprises (GBEs) where the Auditor-General can only undertake efficiency audits at the request of both Houses of Parliament or, if requested, by the responsible Minister.

The legislation to replace the Audit Act, which has been extensively debated by the Parliament but not yet passed, refers to performance audits as a generic term rather than as efficiency or project performance audits. Performance audits have received increasing international recognition and acceptance. And, I might add, attract a great deal of debate. Particularly by complementing other review and evaluation activity they can add considerable value to public sector management.
As well, they can leverage off the systems examination work undertaken in financial statement audits. Both types of audit deal with systems management and control but can involve different types of audit relationships. Our two main business units are based on those audits.

The ANAO is therefore a very important contributor to public accountability. The ANAO brings the benefits of independence and objectivity, professionalism and commitment, ethics and integrity, skills and experience and the knowledge of various best practices. It is these attributes which make the external audit function a valuable contributor to the accountability process for a wide range of issues including systems integrity and management. It is an active not a passive involvement.

One of my first tasks in the ANAO was to focus the Office on the public sector environment, of which we are an integral part, and assess not only the impact and implications for us of the significant changes that have been occurring but also to think about how we could contribute more to its future development. Understanding the environment in which you work is a major challenge for any organisation. As part of the overall framework of public administration, we need to pay close attention to the legislative environment that is now moving closer to reflecting the developments of public sector reforms since 1983. That environment covers the replacements to the Audit Act and to the Public Service Act and also includes the Corporations and Taxation Laws as they apply to the increasing number of GBEs.

An important element of the environment, and one no doubt of particular interest to this audience, is that encompassing financial management, accounting and auditing. It is the one in which we have a close relationship with the professional bodies, tertiary education institutions and with the relevant private and other public sector organisations. As with all public sector agencies and entities we need to understand our own business and strategically align it to our environment.

The ANAO has been through a rather turbulent period of realignment, reflecting in large part the demands and risks of the changing external environment and the inevitable variations to the way in which it does its business, including the opportunities offered by, for example, information technology in a range of systems now available.

It should not be surprising that, after seven years or so as Chair of the former Information Exchange Steering Committee (IESC), I would be concerned about the pervasive effect of communications and computing technology on both our internal and external environments. And, subsequent to my appointment, this view has been overwhelmingly confirmed in my relatively short time in the Office and by the activities described later, including the recent Information Technology Blueprint report by the Office of Government Information Technology (OGIT).

I note that the ANAO last provided an Information Technology (IT) Auditing guide in 1992. Guide to Auditing Computer Based Application Systems, ANAO. AGPS, Canberra, September
That publication is dated in an area that is moving so quickly. There is recognition of the problem of auditing IT based systems which are now being extensively used for management purposes in an emerging paperless office environment. I regard developing the necessary personal abilities and professional skills in these and other areas within the ANAO as also being one of our greatest challenges in the foreseeable future. That means the emphasis has to be largely on developing and attracting people with the capability and commitment to add value within the audit environment.

II RELATING TO OUR ENVIRONMENT

We have been giving considerable thought and attention as to how best we can relate, and contribute, to our environment. From our across-the-service perspective, it is clear that we should be able to assist in Building a Better Public Service. I do not see that this in any way cuts across the independence and objectivity of the ANAO. We will be seeking to have such an involvement, particularly in the MAB/MIAC context. As well, we will need to work closely with agencies on developments such as One Stop Shops, for example the recently established AusIndustry and involvement of the private sector in delivering services, as in the provision of case management for the unemployed. You could also add in competitive tendering and contracting, market testing, out-sourcing, quality service delivery, benchmarking and purchaser/provider splits. There are also changing arrangements for Commonwealth/State relations in regard to program responsibilities under the auspices of the Council of Australian Governments (COAG). These and other related developments are likely to have important ramifications for the way public services are provided and accounted for in the future.

The ANAO aims, by allocating its own resources mainly to the audits of core Government (that is, primarily budget funded and controlled agencies), is to consolidate its expertise and experience in that particular area of public sector activity. There is no doubt in my mind that by doing this, we are increasingly able to provide a more focused and value added service to public sector entities and to the Parliament alike. At the same time, we are gaining valuable experience and exposure through the oversight and management of audits of non-core activities contracted to private sector auditors. This is essential to ensure we have the capacity to adjust quickly to any move to a more contestable and commercially oriented environment and transfer the lessons learned from the more commercial activities of government to core business.

The ANAO is committing increased resources to identify areas of best practice as well as identifying those areas where improvements in administration are required. Best practice guides on topics as diverse as financial management, grants administration, internal audit, and the sale of Commonwealth assets, have been produced by the ANAO. In my view, it is by focusing our attention more on best practice models and ways that administration can be improved, rather than simply highlighting areas of deficiency, that the ANAO can be of greatest assistance to management, the Executive and the Parliament. I will expand on this approach later in talking about a new audit product which we introduced late last year.
We are also currently reassessing our Regional Office presence and structures, as well as our Corporate Services and Information Management functions. The key word is integration. We are endeavouring to create an integrated environment which is able to leverage off the combined people and other assets of the Office such as our information. This is also the image we wish to project to our various stakeholders.

The ANAO regards performance auditing as core business, and as such, these audits will be delivered primarily using ANAO resources. Importantly, however, these resources are and will continue to be supplemented on a needs basis, by private sector people who have particular skills and experience. Over the years, the ANAO has engaged a wide range of expertise from the private sector, including medical practitioners, taxation specialists, construction industry consultants, statisticians and engineers, to assist in particular audits. As well, we will be looking for agency representation on our performance audits not only as a source of intelligence and understanding of an agency's programs and structure but also as a means of personal development for all concerned. Knowledge and expertise can transfer both ways with mutual benefits.

With limited resources at its disposal and a huge number of public sector programs within its mandate, the ANAO undertakes a rigorous strategic planning process and risk assessment for the purposes of identifying areas which will be subject to performance audit. Over recent years the ANAO has made a concerted effort to be more open and consultative in the development of its performance audit programs. This involves extensive consultation with all key stakeholders. These include Parliamentary Committees, individual Parliamentarians, Ministers, Ministers Offices, industry groups and representatives, the community and of course public sector agencies themselves. The ANAO assesses the benefits of conducting a performance audit against a number of criteria and weighs the results of this analysis against the resources it has available. It then undertakes a preliminary analysis or study before finally deciding whether or not to commit resources, and of course those of an agency, to a full performance audit.

The need in the future is to ensure closer co-operation and communication between the ANAO and agencies on performance audits. There is considerable mutual interest in the outcomes. Confidence needs to be promoted in those outcomes for all stakeholders including, importantly, the Parliament. I have indicated to ANAO staff that, while I regard Financial Statement Auditing as our bread and butter, performance audits offer considerable scope for adding real value to public administration. Both will impact on systems development not only ensuring appropriate audit trails are an integral part of those systems for accountability purposes but also that they efficiently and effectively contribute to program objectives.

Careful presentation may ameliorate the more sensational style of media reporting we have sometimes witnessed which can engender friction and legitimate concern for positive outcomes. We will be focused on producing balanced reports which add value by identifying good or best practice and indicating improvements that can be made from experiences elsewhere.
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My final point is about one area of performance auditing which will receive greater attention in the future. We are all aware of Parliamentary and other criticisms of program performance information. While there has been slow improvement in the quality and scope of performance measures, most program managers recognise the growing pressure to provide reasonably comprehensive and credible performance information for accountability purposes. Such information has to be generated from our information systems in a manner which meets the management needs at all levels of our organisations. It is one of the most significant challenges facing public service managers.

III MANAGING OUR INFORMATION FOR BETTER PERFORMANCE

The way we effectively manage the vast array of information held by APS agencies is of fundamental importance to our overall performance. As such there is a growing recognition of the need to ensure its effective management; this includes its utilisation as well as its protection, integrity and confidentiality. Increasingly, information management is being achieved through the use of technology. We are indeed witnessing the advent of the paperless office. However, that phenomenon is still in the process of evolution, admittedly at varying rates in different agencies. As well, other problems have emerged as we have moved to the use of information technology, for example as follows:

Concerns are being expressed throughout government administration that the corporate foundation of information is being diffused. This is happening with the proliferation of computers and their associated networks without adequate control mechanisms to ensure the availability of information to all who may have a reasonable need for it. Improving Electronic Document Management - Guidelines for Australian Government Agencies

Prepared by the IESCs Electronic Data Management Sub-Committee. AGPS, Canberra 1995

(page ix)

See also: Management of Electronic Documents in the Australian Public Service Prepared by the

IESCs Electronic Data Management Sub-Committee. AGPS, Canberra, April 1993

No doubt these issues have been well canvassed by your previous speaker.

We also need to ensure the issues involved for program performance and resource management are well understood at all levels of our organisations as well as by the Parliament and the community at large. I particularly relate to the observations made by the then Western Australian Information Policy Committee in 1992:

Government acts as the trustee of the peoples information, so the ethics associated with such a role are applicable. Government
must achieve a balance between protecting and safeguarding information on the one hand and providing information to achieve efficiency within government and to benefit the community and the economy on the other. Managing the Information Resource. Western Australian Information Policy Committee, Government of Western Australia, Perth, 1992 (pages 27 & 28)

Public sector managers at all levels need to realise and stress that information technology, in its broadest sense, is having a fundamental impact on the business of government. It is also essential that public sector auditors recognise this and respond accordingly. IT is, of course, a means to an end and can facilitate the use of information in all its various forms. The technology has to be managed both strategically and operationally. An organisation's information is one of its major assets and the proper management of this resource can provide it with a strategic advantage in performing its functions. The public sector is undoubtedly the biggest information industry in the country.

Processing power, storage capacity, speed of information access and computer communications are all advancing rapidly and are now being interwoven with the substantial innovations in the communications industry. In the world of jargon, we are now referring to information technology and telecommunications (IT&T) even though they are rapidly becoming almost indistinguishable in our operational environments.

Changing the way Agencies do their Business

The view in Australia, as in other countries, is that technology has and will continue to play a significant part in achieving improved service delivery and fundamentally changing the way in which, individually and increasingly collectively, agencies will do business or perform their functions if you prefer. An important challenge lies in developing an across the service environment that not only leads to improved client service but will also produce significant cost savings. It almost goes without saying that the drive to do more at less cost is as much an imperative in Australia as it is apparently in all public sectors around the world.

It is becoming more generally recognised that information is our second most important asset after our people. Unfortunately, the value of our people has also only been belatedly recognised in the various public service reforms over the last twelve years. Overall performance very much depends importantly on their honesty, integrity and commitment as custodians of public resources including our information and related systems. Managers would do well to reinforce how much these attributes are valued. Recognition is a good start.

Preservation of our important information base is the responsibility of each one of us. I have no doubt that the Parliament and the community will be continuing to seek assurances in various ways that we are maintaining its integrity and security, both in a physical and qualitative (including confidential) sense. As well, as public service managers, we have come to understand and value the extent to which
information has become integral to our functions and our organisational performance. Attention has therefore increasingly been focused on the need to create an accessible but secure environment for our information in whatever form it takes. There has to be an organisational commitment to information as a corporate asset while encouraging innovation and flexibility in its use. This will be particularly important with the current government's commitment to move to electronic commerce by 1997, initially in the area of purchasing.

By way of example of how an individual department's business can be substantially altered, the Australian Department of Social Security (DSS) is set to begin a trial of its own electronic banking card which eventually could independently process the Department's multi-billion dollar annual welfare payments. (I should mention in this context that Australians have shown themselves to be early adopters of information technology-based banking services as they have been in many other areas of technology over the years.)

DSS has joined an electronic banking network that processes transactions for banks and other financial institutions and runs more than a third of Australia's automatic teller machines. The electronic banking card would allow DSS clients to access funds through cash card ATMs without the need for separate bank accounts (welfare payments have increasingly been directly credited to beneficiaries' bank accounts). If the trials are successful, client service would be significantly improved. DSS beneficiaries would not be subject to the various government and bank charges attached to the bank accounts. Of course, the changing nature of the payment systems and the associated risks have also to be addressed in the audit context. More on issues of internal control later.

Another example which might be of interest is the new Automated Job Selection (AJS) project of the Department of Employment, Education and Training (DEET). Touch screen technology is being provided in all Commonwealth Employment Service (CES) Offices throughout Australia (over 2000 touchscreens) to enable job seekers to search interactively for jobs. The screens will enable job seekers to access all jobs in the national job database, not just in the local area. It is likely to be a catalyst for change in how government information services are delivered. This development may well change not only the nature of service delivery but also the organisation itself. Perhaps of even greater impact will be the new Education Network Australia linking schools, universities, other tertiary institutions and education and training providers across Australia as well as internationally.

Another area where there is growing interest in the public sector in Australia at present, as part of our continual search for more cost-effective solutions in devolved environments, is that of information technology data warehousing. This reflects a recognition of information as a corporate asset, the maintenance of its integrity and the requirement for access, including sharing of data at all levels and across areas of organisations. Warehousing techniques facilitate the storage of data in a form suitable for use across the organisation concerned for common business operations. Replication of such data for day to day use helps preserve reliability and availability of the information concerned wherever it might be required.
The report of a Ministerially established Information Technology Review Group, entitled *Clients First*, found that there was:

...*room for reform in how the Government used Information Technology to develop policy and conduct its administration. However, the greatest potential lay in transforming the quality, range and relevance of Government client service delivery.*


The review placed considerable emphasis on commonality and inter-operability to enable maximum flexibility and reduction of duplication. It also stressed the benefits of pursuing cross-agency uses of information technology (IT) in the interests of greater efficiency and better client service delivery. (I will come back to a fuller discussion of the new IT challenges later in this presentation.) As I see it, implicit in the adoption of these concepts is an acknowledgement that there either needs to be some reining-in or at least re-tuning of the previously devolved decision making powers for public sector major Information Technology acquisitions, or we need to find better mechanisms and inducements for facilitating co-operation between our public sector agencies.

The importance of better inter and intra agency co-ordination of IT to service delivery and the cost to Government of information technology cannot be overstated. I should also add the desirability of seamless integration of agency systems in order to be able to exchange documentation of all kinds in electronic form.

**Audit Challenges in the Information Environment**

The challenges facing auditors are, to say the very least, significant. For the ANAO I would broadly categorise the challenges into three main areas:

- developing methodologies and computerised tools to keep pace with the changes occurring in data management and communication in individual agencies;

- encouraging and assisting, where possible, the Australian Public Services efforts for across the service IT initiatives and innovation in individual agencies; and

- ensuring we maximise the benefits of information technology in our own audit practice to improve audit quality and increase productivity.

We see it as part of our responsibility to contribute more in areas such as the development of new systems. We are currently exploring ways in which this is
best achieved. Given limited ANAO resources, we do need to target carefully our audit activities rather than seek to cover all areas of the substantial activity taking place across the Federal public sector. However, I see it as important that, where possible, we provide advice on the effectiveness of new systems, including the adequacy of their checks and balances. Encouraging internal audit work in this area has always been an important part of our strategy. I will say more about that relationship later. I was impressed by the many papers presented at a working seminar of the International Organisation of Supreme Audit Institutions (INTOSAI) in March last year on Performance Auditing of the use of EDP which included observations such as the following:

It is necessary for auditors to examine systems development projects. An audit office has never been compromised for so doing but conversely there are examples where an office has been compromised for not having taken action. Unfortunately there is no universally accepted code of practice as to how and when auditors shall examine systems under development. Performance Auditing of the use of EDP Future Challenges: Proceedings from the INTOSAI

Working Seminar on the theme of Future Risks and Opportunities in the Field of Performance Auditing of the use of IT/EDP. The Swedish National Audit Office, Stockholm, Sweden.

14-15 March 1995 (page 14)

The proceedings warned of the recurring dilemma about how the audit function should avoid capture in a project and be held responsible for decisions and outcomes. I agree that we are on safer grounds when indicating the sort of standards that are applied by others adopting best practice. In this respect, ISO 9000 is probably useful as a starting point for checklists. Perhaps I should leave the last word on this subject to John Adshead of the Office of the Auditor General of Canada:

There is no magic solution to delivering successful systems. There are common-sense guidelines that can provide assurance that a major project can be delivered on time, within budget, and satisfies the users requirements. Systems Under Development Dr John Adshead, Office of the Auditor General of Canada, 1995

In giving encouragement to information technology innovation, I expect my Office to develop an ability to identify best practice and assist by communicating it to other areas of the public service. I have also undertaken to help the Governments Chief Information Officer wherever we can, particularly in any whole-of-government approach and systems development. We are represented on relevant committees from a user perspective as I will note later.

Applying technology to audits of financial statements
A key element of the ANAOs future Information Technology Strategy is to re-equip auditors with current, state of the art hardware and integrated audit technology software products. Over the next 2-3 years, the ANAO will also be making significant enhancements to the way we plan and execute our financial statement audits by integrating information technology into all phases of the audit process. The ANAO sees this change as positioning it as a leader in public sector auditing and best practice in financial statement audit methodologies.

The ANAO has entered into a strategic relationship with the international accounting firm, Price Waterhouse, which will involve the ANAO and Price Waterhouse working together in the development and delivery of state of the art technology software products that will best meet public sector auditing requirements and the ANAO's financial statement audit responsibilities. Our association with Price Waterhouse in no way impinges upon our professional relationship or on our independence. The approach has also been adopted elsewhere for both internal and external audit purposes. We have done a lot of work to customise the product to the public sector environment.

The benefits of this new strategic direction are twofold. This technology will enhance our capacity to work more closely with you in the provision of audit services and will enable us to further improve our work practices leading to an increase in the overall effectiveness of the audit process. We also will have access to a wider range of relevant information and material, thus enhancing our ability to assist you in meeting your financial statement and related responsibilities.

In order to ensure the smooth transition of the technology into the ANAO an implementation program covering a 2-3 year period is envisaged. This will involve piloting the new technology in conducting a selected number of financial statement audits during 1995-96, with full implementation of the technology occurring during 1996-97.

I am confident that this important initiative will build on, and progress the ANAO's commitment in meeting your needs as well as those of the Parliament, in auditing the financial statements of Commonwealth public sector entities, and we look forward to working closely with you and your officers to ensure maximum benefits are gained from it.

I would now like to briefly mention a number of systems development issues and initiatives currently in train in the ANAO. I have no doubt that these, and a whole variety of other actions that we are undertaking to improve our audit capacity, will further enhance our capacity to add value in this area.

Audit involvement in systems development

Systems development projects are notorious for cost/time overruns. Implemented systems are equally notorious for not meeting all user requirements. Systems, especially IT systems, often have under-designed control frameworks. This
environment focuses attention on the systems development process because of the costly down-stream effects of inadequate design and implementation.

The concept of pre-implementation audits by internal audit is well established. Normally such audits are undertaken for all major systems under development in departments and agencies, and are reflected in the policies and plans of the internal audit section. There is today a growing acceptance of the concept of external audit involvement in the systems development process itself. Clearly, the danger of such involvement is that it can lead to a loss of independence by the auditor.

Some guidance on the issue is provided by the Information Systems Audit and Control Association:

In the development of an application system, the project team is responsible for applying the system development process, which includes the design and implementation of controls. The auditor should be independent of the project team. The auditor should independently determine the procedures to be applied in performing an application development review. The auditor may recommend controls and other system enhancements without impairing the auditors independence

Independence may be impaired if the auditor becomes actively involved in the design and implementation of the application system. For example, if the auditor becomes a decision making member of the project team (eg making decisions regarding specific controls)

The auditors involvement as a member of the project team in the design and implementation of audit tools and techniques (eg embedded audit modules) does not impair the auditors independence. Statement on Information Systems Auditing Standards No 2: Information Systems Audit & Control

Association, April 1989

This advice confirms the view that any potential loss of objectivity or independence by the auditor can be avoided through appropriate terms of reference and a suitable assignment strategy. In addition, there should be a clear understanding that any involvement by the auditor during systems development is expressed as a value added contribution: the decision as to whether to adopt audit suggestions will always be made by the project team. The ANAO is currently considering the issue, and will determine a policy which will satisfy the clear need for such audit involvement in the systems development process.

We have recently developed our own home page on the Internet with access to details about our Corporate Plan, Corporate Structure and recent reports published (access reference http://www.anao.gov.au). Depending on any other
future initiatives aimed at facilitating access to government information, we will be further exploring the use of the Internet in disseminating relevant papers, guides, circulars and reports. We have also recently installed a new Office system which we will be aiming to integrate with our other auditing systems which are also now being put in place. This Office system is based on Microsoft products and is complemented by Lotus Notes.

The use of IT tools will also continue to be a crucial element of our performance audit methodology. For many years now, our performance auditors have drawn on a suite of automated tools to assist them carrying out complex audits. These tools include, survey software, database packages for data analysis, and data interrogation systems. Microsoft project has also been introduced to facilitate improved project management. As well, we are looking at how Lotus Notes can assist performance auditors to further refine and manage the extensive volume of information used during an audit.

Preservation of the public service information base in efficient and effective systems is the responsibility of each one of us. I have no doubt that the Parliament and the community will be continuing to seek assurances in various ways that we are maintaining its integrity and security, both in a physical and qualitative (including confidential) sense. As well, as public service managers, we have come to understand and value the extent to which information has become integral to our functions and our organisational performance. Attention has therefore increasingly been focused on the need to create an accessible but secure environment for our information in whatever form it takes.

The pace and impact of information technology development will be, I suspect, the greatest challenge we face as we move into the next millennium.

IV FINANCIAL MANAGEMENT ENVIRONMENT

Having indicated where the ANAO is coming from in its relationship to the public sector and information environments, let me now discuss some important issues that bear on the financial management environment which is the main focus of the FINEST system and the one that brings you here today.

You may be interested in a checklist of issues relating to the development of the financial management setting within individual programs which was indicated in a recent audit report Financial Management - Department of Veterans Affairs ANAO Audit Report No. 7. AGPS, Canberra, November 1995 and is attached to this paper. That audit focused, inter alia, on the ability of financial management systems to provide information that is timely, accurate and relevant to the needs of management and other users. It is well worth a read. Of particular relevance is the finding that managers are not sufficiently trained on management-oriented financial administration or analyses. And, bearing on earlier remarks, the financial systems are not well integrated and their nature (largely data processing) had resulted in inefficient and ineffective reporting arrangements. In my experience these problems are common to most
agencies. Another useful publication, which was prepared for a more commercial environment but is nevertheless helpful for managers using accrual information, is the Australian Society of CPAs Best Practices Guide to Financial Management. Best Practices Guide to Financial Management  Treasury Centre of Excellence, Australian Society of Certified Practising Accountants.  Melbourne, 1995

From an audit viewpoint there are three areas which will impact significantly on our relationships with agencies in the immediate future. These are corporate governance (including internal control), accrual reporting (accounting) and whole of government reporting.

**Corporate Governance/Internal Control**

Two areas of particular interest for resource management in the immediate future will be corporate governance and internal controls. Both are integrally related with the risk management approach. Interest in these areas is by no means confined to the public sector or, indeed, only the concern of the private sector. Essentially, corporate governance is about the system by which businesses or functions are controlled and managed. The issues are largely about leadership, accountability and performance. The ANAO will be identifying and following up corporate governance issues with agencies in 1996. We will also be looking for assistance from the Accounting and Auditing Profession. This is part of our own continuous improvement processes, including the use of continuous improvement or breakthrough teams. The latter are an important contributor to our strategic directions.

The Commonwealth Government has undertaken extensive reform of the public sector. The pressure on the Commonwealth Government to provide more services with less has led, in part, to the introduction of private sector approaches to the structuring of government businesses including, for example, the appointment of boards of directors. This has focused attention on corporate governance but, I hasten to add, not just for commercially oriented government organisations.

There has been considerable debate in the media in recent months about corporate governance issues. As well, guidelines for good corporate governance have been released by the Institute of Company Directors. At the heart of corporate governance issues for the Commonwealth public sector is their linkage with the accountability processes involving the management and boards of government business enterprises, portfolio departments and the Parliament.

Corporate governance for the public sector raises a myriad of issues associated with accountability of boards of directors, as they relate to reporting arrangements on corporate performance, appointment of chief executive officers, board structures, related party transactions, and government indemnification arrangements for the representatives of their Executive Officers in a departmental environment among others. The ANAO will be canvassing with Commonwealth
agencies good practices for public sector corporate governance in the coming months.

Both internal control and external review are necessary for strategic management and accountability. No amount of external review can by itself ensure an entity achieves its objectives, although it may prompt stakeholders to initiate changes to enable objectives to be met. Equally, sound internal control not reported on to external stakeholders (who are not in a position to command information on operations) leaves the stakeholders without assurance that the entity is not unduly exposed at least to less than adequate performance if not to financial loss.

That said, there is much that an external reviewer, such as the Auditor-General, can find in internal control to facilitate the review task, while at the same time be in a position to contribute meaningfully to improvements in that internal control. But are we focusing on the right issues. This question was raised by a Director of the United Kingdom National Audit Office (NAO) last year in discussing the twin cycles of performance management, that is the accountability and control cycle and the learning cycle. He referred to a study undertaken by a UK consulting firm which suggested that there is generally poor performance on the latter, particularly in analysis, dialogue and commitment. He raised the question which is relevant to the audit relationship with agencies and entities as follows:

Do auditors reflect learning cycle criteria as much as they should in their work, or do they concentrate on accountability matters?  

The objectives and Performance Measurement of Performance Audit  

Nick Sloan, Director NAO  

(UK) Symposium on Performance Auditing and Performance Improvement in Government.  Paris,  

6-7 June 1995 (page 5)

Benchmarking and Best Practice

Benchmarking is a management tool or a business strategy that selects the key processes and strategies that impact on the clients or customers expectations and measures these against recognised best practice. As a key management tool in developing and maintaining good business performance the ANAO is keen to encourage and develop benchmarking and best practice in the Australian Public Service. I earlier mentioned the work of the ANAO in developing best practice guides as part of its audit work.

However, it should always be remembered that benchmarking is of limited value if undertaken in isolation, undertaken on non-comparable data or conducted as a one-off exercise. To be of continuing value it must be incorporated into the culture of the organisation and assessed regularly against all aspects of the organisations operations.

In line with our move to a value adding ANAO, late last year I wrote to the heads of departments and agencies advising of the ANAO’s intention to conduct a
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program of audits of financial controls and administration. The focus of these audits will be on identifying best practice in common areas of administration, such as procurement, accounts processing, performance measures and indicators, travel and related expenses, asset management and risk management. The types of activities this program will address, while individually not material in many agencies, collectively represent a significant element of public sector administration and account for a significant level of expenditure each year. Resource implications also will often go further than just cost. Apart from issues of regularity and value for money, the audits will consider any issues of probity and propriety of officials behaviour that may arise.

I am very confident that with the goodwill and co-operation of agencies, the ANAO will be able to add considerable value to public sector administration and accountability through these audits. An explanation of the nature of those audits, their delivery and the products themselves is contained in Financial Control and Administration Audit Charter The Auditor-General.

ANAO. AGPS, Canberra 1995 To date, the feedback from heads of agencies and Parliamentary Committees has been quite positive. We will also be seeking ideas and feedback generally from a series of seminars and workshops we are conducting to ensure that there is a good understanding of the nature and intent of these audits.

While the results of these audits will be reported in the normal way to the individual Ministers, departments and agencies, it is intended that the Reports to Parliament will be generic in nature in order to provide the Parliament with a better perspective of areas of best practice, as well as areas where improvement is warranted. Therefore, the intention is to mention by name only those organisations, for contact purposes, which have demonstrated approaches and practices that might be useful elsewhere. I have no doubt that many useful initiatives will be in the systems areas, mainly those based on information technology (IT).

We are also undertaking a number of other activities aimed at disseminating best practice amongst agencies. These include:

- financial reporting seminars;

- development of a best practice guide on Financial Statement preparation processes; and

- issue of guidance matters in the form of model accrual accounts for three classifications of agencies.

ANAO involvement in HRMIS/FMIS rationalisation
The ANAO is a member of the Shared Systems Steering Committee, chaired by Dr Andy Macdonald (CGIO), which was formed in the latter part of last year with the objectives of defining and agreeing to a strategy for the provision of information systems to address the corporate needs of agencies taking into account both line agency and central agency information needs and a whole of government perspective.

This is being addressed in two stages, the first stage being confined to such administrative systems as HRM, FMIS, Payroll and associated support systems. A recommendation will be made to the Committee of Officials on Information Services and to the Government Information Services Policy Board for their considerations and endorsement, thereafter lodging a submission for consideration by Cabinet with recommendations on the requirements.

This is being effected via a lead agency principle whereby the present lead agencies, Social Security for the FMIS, DEET for the HRMIS and Immigration for the Records management systems, undertakes to lead the research project, consulting with agencies on a regular basis. The ANAO is represented on all three sub-committees.

The Records management systems group are now in the initial stages of surveying the needs of agencies. The other groups have carried out market testing, developed generic fundamental evaluation criteria, and separately, specific evaluation criteria, and together developed an RFI which closed on 19 January last. The submissions are currently being evaluated. It is intended that a Request for Proposal will be sought in early March. The responses will then be evaluated and recommendations only forwarded to the Shared Systems Steering Committee (SSSC) in May. Present thinking is that a Cabinet Submission will be prepared in June with implementation of an agreed approach commencing in July.

There is another group which represents the interests of small agencies, which have special needs in this area, needing to balance the need for information to support good management, and the resources available to expend on these needs. This group is ensuring that the Committee does not tie small agencies into systems which would be expensive and unwieldy for them to run, and at the same time is exploring options which would meet their needs. These options include partnering with other agencies and sharing software and systems, and consideration of outsourcing the functions both within and outside the APS. These are considerations that are of great interest to the ANAO both from an audit perspective but also as a small agency which does not have an HRMIS and no accrual based FMIS.

You may be aware that the Department of Finance in association with the IESC has produced guidance material on the selection and implementation of such systems over the last five years or so. A relevant example is the 1993 guide to implementing financial management systems. How to implement a FMIS - A Guide  Department of Finance. AGPS, Canberra 1993

Risk Management
Risk Management is an important, and one might say pervasive, element underlying many of the public service reforms which have taken place. A useful way of defining a risk management approach is that it is one which identifies all material areas of possible loss/error/opportunity, assesses the benefits and costs of the available options and enables informed judgements about the level and costs of risks involved in achieving cost effective outcomes. To many, it is a challenge to traditional public service thinking. This has been reinforced by Parliamentary concerns about accountability, although there has been growing support within the Parliament for the concept to be applied by public service management's within firm guidelines.

The ANAO is a strong supporter of the concept of risk management - after all managing risk is, or should be, an essential element of good management practice, particularly in today's climate of increasing financial constraint, greater competitiveness and contestability for both advice and services. However, we are also having to address a perception that auditors have inhibited the development of the concept by being unduly critical of initiatives taken and mistakes made. The Australian Public Service Reformed - An Evaluation of a Decade of Management Reform, Task Force on Management Improvement, AGPS Canberra December 1992 (page 101) As with the Parliament, our concern is to establish firm accountability guidelines for those taking such decisions. But, I stress, it is important to focus primarily on the outcomes we are seeking to achieve not just the methods used to do so.

The overriding aim of all the ANAO does is to improve public administration in the accountability framework through which its own performance will largely be judged. Managing risk efficiently and effectively reflects one concrete way in which this can be achieved. In this regard, the ANAO is interested to see whether agency management has assessed the organisational risks, included in this would be security risks, in a structured manner and planned accordingly. Costs/benefit analyses are an important part of managing risk. However, it is not cost-effective, nor appropriate, to cover every risk. As good managers, we should all look to continuously assess risks, assign priorities and probabilities and establish a controlled environment for managing those risks. Risk identification has become an important element of management's responsibilities.

The MAB/MIAC Exposure Draft on Managing Risk - Exposure Draft (Guidelines for Managing Risk in the Australian Public Service) MAB/MIAC Report No 17, AGPS Canberra, July 1995 is, in my view, a very timely publication which will help us all focus greater attention on the importance of risk management. As my colleague Ian McPhee recently said:

*The publication is well written and illustrated, and strongly emphasises the need to manage risk; and in doing this to focus on two elements:

- the likelihood of something happening; and*
DRAFT

· the consequences if it happens.

It also underlines the desirability of developing a mind set of being conscious that managing the risks in relation to every decision:

· it means you cant assume everything will go right. Address by Ian McPhee, National Business Director, Australian National Audit Office,

MAB/MIAC Seminar, Managing Risk, Canberra, October 1995

The Exposure Draft underlines a point I would like to stress in relation to security and that is the importance of the issue of documenting key elements of a risk management strategy. The Exposure Draft suggests that the answer to the question of when documentation is important is when it could count. It goes on to indicate the benefits of documenting the risk management strategy are to:

· help ensure the analysis is done;
· be available for review;
· facilitate communication to staff and others involved in the program so there is a shared understanding of directions and associated risks; and
· if ever required, it is available in defence of the program.

That is, documentation facilitates understanding and accountability.

As we move more into paperless offices as a reality, there has been growing concern about how to handle electronic documentation. In this respect I commend to you the Guidelines for Improving Electronic Documents Management prepared by the Electronic Data Management Sub-Committee of the then Information Exchange Steering Committee (IESC) which I referred to earlier.

In response to an audit report on the results of the Departments 1994-95 financial statements, the Secretary of Transport recently informed me, inter alia, that he has commissioned a security risk review by ASIO. His expectation is that the review will provide the Department with a strategic focus for the Departments security arrangements. He noted that ASIO's approach aims to identify risk exposure, assess the level of that exposure and propose options for controlling risks at levels that are acceptable to the Department. This is part of a departmental review of security procedures. Other action is also in train which indicates the priority and importance attached to the review. I was particularly interested in two issues being addressed, one being system access by Information Technology (IT) staff and the other the installation of procedures to improve system recovery in the event of a major disaster. These initiatives are part of the Departments approach to risk management and reflect the need for risk assessment by management as a means to improve departmental performance. This is a tangible example of the principles involved in managing security and other risks for greater efficiency and effectiveness and a successful outcome from a co-operative effort.
Because of the significance of risk management in public sector reform, a prime focus was given to this aspect in the audit of selected entities in the last financial year. Risk management in these entities was assessed and measured against specific audit criteria in their 1994-95 financial statements.

The audit work on risk management looked at how particular entities identified financial risks attaching to each of their programs, and how they assessed the effect and magnitude of those risks. It then looked at how the management of each entity addressed those risks within its operating framework. That framework should include any responsibilities or restrictions placed on the entity or its programs by legislation, and the relative costs of implementing measures to counter risks. The later steps in an entity's risk management include mechanisms to monitor its earlier assessments to assess the effectiveness of the activities or controls put in place to counter the significant risks identified. The final step would be to use the output of that monitoring process to improve the effectiveness of the risk management process, while taking account of the costs of possible improvements. In some instances, the outcome of such monitoring is that parts of the control regime can be relaxed on the basis that risks and their effects are not as great as had previously been assessed. The issue is basically one of achieving an appropriate balance between risk and performance.

Risk management was reviewed in selected entities with a reporting outcome in general terms of 50% having sound risk management practices in place, 48% are in the process of developing risk management practices, 2% not having taken appropriate steps to implement risk management practices.

Fraud control plans were preceded by a formal risk assessment. While this provided a useful base for the adoption of risk management in the wider context, the ANAO has encouraged entities to broaden their assessments and strategies consistent with Public Sector Best Practice guidelines.

The results of the 1994-95 financial statement audits (FSAs) identified a continuing improvement in the standard of financial management of Commonwealth entities, with audits disclosing that the majority have in place effective internal structures which can be relied on to produce accurate and credible financial statements. During this cycle of audits, the ANAO made more than 1500 recommendations to entities directed at improving financial management, operations and administration. My report on these audits identified the following areas requiring immediate attention or within the short term:

- improving control over the operations of IT installations and operations;

- enhanced attention to the performance of regular and timely reconciliations of financial records; and
- establishing effective procedures and controls over the custody and financial recording of assets. Results of the 1994-95 Financial Statements Audits of Commonwealth Entities ANAO Audit Report No. 13 AGPS Canberra, November 1995 (see, for example, page xxiii)

On the Performance audit side, risk management also features prominently both in terms of risk to the Commonwealth and public, that is, an external focus and risk to the ANAO being an internal focus.

Taking the external focus first, ANAO has conducted several performance audits of how other Commonwealth agencies manage risks facing the Commonwealth or the general public.

For example, in an audit of the management of the construction of the new Collins class submarines for the Royal Australian Navy by the Department of Defence, we analysed the risks to the Commonwealth and developed a set of criteria based on minimising these risks. These risks included technical risks, financial risks, the risk of paying too much for the submarines and the risk of delayed delivery. The ANAO found that although the technical risks appeared to have been well managed, management of major commercial risks had been less than satisfactory. In another audit where ANAO looked at Australia's plans for responding to a major oil spill we found that, in some cases, equipment stockpiles did not correlate with the assessment of risk by the agency responsible. And, more recently, an audit of risk management by Commonwealth Consumer Product Safety Regulations found that the regulations had not adopted a risk management approach throughout the full range of their operations, and were not monitoring or evaluating their performance outcomes to ensure consumers are being adequately protected.

Several audits are currently in progress with a strong risk management emphasis.

**Accrual Reporting (Accounting)**

Another important element of the APS reform agenda which has had an impact on the management of the Commonwealth's asset base is the introduction of accrual reporting.

As most of you would be aware, the Commonwealth's financial reporting - at least in the core public sector - has traditionally been based on cash accounting principles with little or no requirement to account for assets and liabilities. That changed in 1988-89 when the Commonwealth introduced a system of modified accrual reporting for departments. This was the first step in the move to full accrual reporting which was achieved for 1994-95. This initiative represented a tangible recognition of the need to bring to account and report on the assets under the control of departments. Under the previous cash base system, while assets needed to be adequately controlled, there was no need for them to be valued and for this figure to be reported in the accounts of Government. Not surprisingly, many managers regarded their assets virtually as a free good. A policy of virtually...
self insurance by the Commonwealth largely reinforced this view. I say virtually because there was no necessary guarantee that the departments might not have been asked to look first at their own budgets to replace any losses. However, for the most part, the budget could be relied on to replace lost, damaged or destroyed assets. Perhaps more importantly, there has been a growing realisation, particularly in the information technology (computer) arena, of the possible enormous disruption to an agency's business from such occurrences where the likely impact goes well beyond just the budgetary cost.

Perhaps not surprisingly, therefore, one of the major problems encountered in the move to accrual reporting has been the identification and valuation of information. Arising out of this situation has been the recognition of the need to instil an attitude of mind, or put another way, a change in culture, which recognises information as a corporate asset, the integrity and security of which is the responsibility of all of us. I have been quite surprised over the years at the apparent relaxed attitude of many managers about protective security issues and disaster recovery (or, latterly, described as business resumption) arrangements. As I mentioned earlier, information is a very valuable resource and its preservation and effective utilisation are essential if we are to achieve our performance targets or, even more basically, simply meet our functional (business) responsibilities.

Using accrual information

The introduction of accrual reporting and accounting is a major element of financial management reform in the Commonwealth public sector. Accrual accounting recognises the economic effects of transactions at the time they occur, regardless of their immediate cash flow effects. Under this accounting arrangement, costs incurred are matched with the benefits derived within a particular period to report resources controlled at the end of that period. Managers are still coming to grips with those concepts.

Accounting reports, based on accrual accounting provide information useful for making and evaluating decisions about the allocation and use of all resources in the enterprise as a going concern and not just cash-based transactions at a point in time. The types of accrual accounting information relevant to agencies include:

- the full cost of operations, including the financial effect of decisions made, in a reporting period;
- the extent to which costs have been recovered in a reporting period; and
- resources held and obligations outstanding at the end of the reporting period.

You may be interested in the illustration of the application of a variety of accrual-based financial ratios recommended in the Finance publication The New Financial Reports of Agencies - A guide to the use of accrual accounting and reporting.
I should mention in passing that the ANAO, in the performance audit of financial management in Veterans Affairs referred to earlier, found that there is still a lot of ground to be covered if the Commonwealth public sector is to fully embrace the elements of accrual accounting in program management.

The transition from cash reporting to modified and then full accrual reporting, as distinct from accrual accounting, has been a particularly difficult one for some departments and agencies. The ANAO has, in my observation, contributed significantly to the situation whereby all departments in 1995 reported on a full accrual basis with no more than a handful receiving adverse commentary in the audit opinion on their financial statements.

**Whole of Government Reporting**

That leads me to introduce the question of whole of Government reporting. With the introduction of whole of Government reporting in a number of jurisdictions already, and the release in 1995 of Exposure Draft 62 by the Australian Accounting Research Foundation (the accounting professions standards setter), I suggest it is a matter of when, not if, that whole of Government reporting will be introduced into the Commonwealth Government arena. Indeed, the Parliamentary Joint Committee of Public Accounts (JCPA) recently concluded that:

*The Government should articulate a clear vision for the future of financial reporting in the Commonwealth, incorporating whole of government reporting, accrual management and, possibly, accrual based budgeting.* Accrual Accounting - A Cultural Change Report No. 338 of the Joint Committee of Public Accounts. AGPS Canberra, August 1995 (page xii)

The Committee went on to recommend that the Government should commit itself to the preparation, at least annually, of whole of government reports for the Commonwealth. IBID., (Recommendation 12) page 86

The Committee has also announced a further inquiry into fiscal responsibility legislation and whole of government reporting. This is likely to give greater impetus to the growing focus on the accountability of government as a whole.

So what is Whole of Government Reporting? Put succinctly, and in the perspective of the Commonwealth, whole of government reporting would require a full consolidation of the financial statements of just over 400 entities which the Commonwealth controls. The consolidation would involve all the normal intricacies of consolidations such as identification and elimination of inter-group transactions and balances and the bringing into alignment of accounting policies.
Fortunately, the latter are reasonably centralised under the direction of the Minister for Finance although there are apparent problem areas such as asset valuation.

The key issues associated with whole of government reporting relate to the *how* and *what* of whole of government reporting, and perhaps most importantly, to answer the question *why bother?*

To start with - *how*? - or more accurately, on what basis should the consolidation occur? ED56 suggests that the consolidation should occur on the basis of control. This would pick up tests such as:

- ministerial or other government power of direction;
- capacity to remove the majority of the directors; and
- majority of voting rights.

It is probably no real surprise that the application of such tests is, in some instances, quite problematical. For example, does the Commonwealth Government control the Reserve Bank or the judiciary? While the issue of determining control is not always straightforward, the Exposure Draft makes the point (paragraph 36) that the existence of control for the purpose of reporting does not necessarily indicate there is also control over the manner in which professional functions are performed by an entity.

Whilst ED62 suggests that control is the appropriate basis to use for consolidation, a number of other options are also available. One leading academic has suggested that an economic dependency test might be more appropriate. (Would this require the Commonwealth to consolidate its GBEs or the GBEs to consolidate the Commonwealth?) In any event, it would seem to require consolidation of the State governments and any private sector business or charitable organisation which is largely dependent upon government business or funding.

A further suggestion is that the GBEs and financial institutions could be equity accounted. **NOTE:** Under equity accounting, GBEs would be included as one line (investments) in the whole of government financial statements. The value of the investment reported is increased by the Commonwealth’s share of profits earned by the GBEs and reduced by the value of any dividends received from the GBE.

In comparison, under a full consolidation, the financial statements of the GBE are added to those of the parent, line by line (with adjustments then made for inter-group transactions).

The impact of this difference is best explained by an example. Under full consolidation, the
borrowings (or any other) figure in the whole of government statements would show all borrowings of the Commonwealth, including those undertaken by GBEs. If GBEs were equity accounted, their borrowings would not be reported, as they are, in effect, netted off against the assets of the GBE in determining the investment figure, rather than consolidated.

A number of issues also emerge as to how we should implement whole of government reporting, for example:

- how do we collect the source financial information from our around 400 controlled entities?
- how do we identify material inter-group transactions and balances; and
- how do we ensure consistency of accounting policies?

Finally, there is the question as to how we bring all of this together into one set of statements. The New South Wales Treasury prepares its whole of government statements using computer spreadsheets. They currently consolidate around 400 entities, broadly similar to the numbers the Commonwealth would cover although of somewhat more limited size and coverage. I understand they are in the process of developing an accounting system for budgeting as well as handling consolidation. Indeed, we will learn from that experience as well as that overseas, such as in New Zealand and Canada.

Perhaps the greatest debate in relation to whole of government reporting is the What question, that is, what does it all mean? To be frank, there have been doubts cast on its value by a number of senior public servants over recent years, particularly as to what additional intelligence it provides. But it should be observed that these are providers not users of general purpose financial reports. In essence the main perceived problem comes down to the possible interpretation by users of the information provided. Because they can not measure the taxing power of the Government as an asset, the financial statements could well indicate that the Government is technically insolvent. As an example, the New Zealand 1994 whole of government accounts recorded that current liabilities exceeded current assets by $NZ 7 billion. Great care will need to be taken in ensuring that the bottom line measure of net worth/net assets is sensibly interpreted, particularly by financial commentators.

Given such difficulties associated with the preparation of whole of government reports, and the interpretational risks inherent in the process, why do it?

Any decision by the Government to prepare whole of government financial reports will undoubtedly be influenced by practices adopted overseas, the decisions of the accounting profession, and recommendations from Parliament, for example through reports of the Joint Committee of Public Accounts. The benefits of whole of government reporting are largely associated with the fact that it provides one reference source which details total government resources and obligations. While
much of this information is currently available in the reports of individual Commonwealth departments, authorities and companies, it is not provided in one reference source. Whole of government reporting would draw this information together to enable strategic assessments and planning at government level.

Whole of government reporting also allows governments to better measure their financial position from one period to the next. It is likely to be most useful in medium to long term analysis, for example in identifying longer term trends which may require government action sooner rather than later.

Turning to the role of the ANAO. The ANAO, and indeed all State Auditors-General, are in a sensitive situation in relation to government decisions on financial reporting and the accounting professions standards. Should governments elect not to prepare their financial statements in accordance with accounting standards, the Auditors-General would be required, under professional obligations, to qualify those financial statements. Such qualification could place at risk the credibility of government financial reporting. A similar situation to this arose with the Reserve Banks financial statements for 1994-95. The Bank elected not to report in accordance with a standard resulting in what was a technical qualification having no material impact on the financial outcome but could have given rise to adverse comment.

To avoid this scenario, the ANAO intends to work closely with the Department of Finance and the accounting profession over the next couple of years to resolve the kind of issues outlined above. On whole of government reporting we need to ensure that the source data and processes of consolidation are sufficiently reliable and auditable. This is obviously a priority over the next year or so if we are to meet the standards requirement.

As the first step in this process, we are currently working with Finance to develop a proforma set of statements based on 1994-95 financial information. As part of this process we will examine issues such as:

- the appropriate form and content of the statements;
- processes for the collection of information and preparation of the statements; and
- appropriate accounting policies and treatments.

I have indicated to the JCPA that the ANAO would welcome their views on a progressive basis as we go through the development phase. This has both an educative and, hopefully, supportive value. However, I stress that the Government still has to take a decision on such reporting and its timing.

V ASSURANCE ABOUT I.T. SECURITY AND PRIVACY
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No discussion of IT based systems would be complete without canvassing security and privacy issues which are of particular concern to the Parliament. It is important that the ANAO can provide assurances about various financial and other systems in these respects. In particular, the ANAO would be looking for best practice in both providing for security and privacy concerns but also making efficient and effective use of the underlying information.

I.T. Security Aspects

The most widely accepted definition of IT security was developed by the European Union (EU) in 1990, when it combined the security standards work of the United Kingdom, Germany, France, and the Netherlands, and published the European Commission Harmonised Information Technology Security Evaluation Criteria (ITSEC). Security includes the following components:

- confidentiality - the prevention of unauthorised disclosure of information;
- integrity - the prevention of unauthorised modification of information; and
- availability - the prevention of unauthorised withholding of information or resources.

Before publication of the ITSEC, security definitions, such as that provided by the Orange Book published by the US National Computer Security Center, Department of Defense Trusted Computer System Evaluation Criteria; National Computer Security Center, 1985 emphasised the confidentiality aspect of security, with little or no mention of integrity and availability. The ITSEC provided government support for formally raising the integrity and availability aspects of IT security to a level equal to confidentiality.

However, some of those involved with the formulation of security criteria have argued that limiting the definition to confidentiality, integrity, and availability is a dangerous oversimplification, and that the preservation of these three elements does not include protection from many kinds of information losses that information security should currently address, given the move to new computing environments. Accordingly, the inclusion of the following security aspects need to be considered:

- utility - focussing on the usefulness of information;
- authenticity - focusing on information being real and genuine for the intended purpose; and
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- possession - focusing on the ownership or control of information

Within the last decade, however, management has recognised the need for strong internal controls surrounding IT and has implemented many basic controls. Despite these measures, with recent technological advances, many of the business control risks have increased and new exposures in information systems have been introduced through the following means:

- the increased use of PCs and local-area networks (LANs) throughout organisations without concomitant training on basic IT security issues of access controls, backup and recovery, and authorisation controls;

- the increased use of dial-in modems attached to department and enterprise networks provides new opportunities for unauthorised access to data resources;

- the increased use of user-driven development tools and client/server architectures that often do not make use of more traditional development controls;

- the increased use of messaging systems providing funds transfer and Electronic Data Interchange (EDI) services between organisations and across national boundaries; Given the move to electronic commerce referred to earlier, there is increased interest in its ramifications both in terms of security and audit implications. The following is a useful article in these respects:
  - EDI and the Paperless Audit John Adshead. intoIT The INTOSAI IT Journal, Issue 3. January 1996 (pages 17-20) and

- the provision of various aspects of information systems being outsourced to third parties, reducing the effectiveness of internal organisational controls.

These trends will increase as management further expands the use of the computer systems. The net effect is that most organisations that use information extensively as a resource are susceptible to these risks:

- manipulation of data to defraud the organisation;

- intentional or unintentional disclosure of sensitive data; and
Thus, it is essential that management ensures that all automated systems contain provisions to reduce these potential risks through the implementation of effective security and control measures. In most of the security incidents during the last several years, the majority of security problems have been employee fraud or overt destruction of data and related resources.

The general thrust of an IT audit is to assess if an agency's computer system processes data in a complete, accurate and reliable manner so as to enable the agency to carry out its business efficiently and effectively. A basic requirement is that all systems should incorporate an audit trail or audit log. Systems security audit trails should be monitored on a regular basis by the Systems Supervisor or an agency's Computer Security Officer(s). The IESC's Security Guidelines indicate that security audit logs covering a period of at least twelve months should be kept in the system or archived to tapes or floppy discs. I referred earlier to a guide to auditing computer based application systems issued by the ANAO for its staff in 1992 which, inter alia, outlines the general audit framework in which such audits should be conducted. Op.cit., (pages 1-5)

Due to the various technologies used and different platforms that generally combine to make what we call a computer system and its associated networks this subject will be considered in several parts. It is an axiom of security that a mechanism for protection should be incorporated into the lowest layers of a system. The Protection of Information in Computer Systems; Saltzer J. H. & Schroder M. D. Proceedings of the Institute of Electrical and Electronic Engineers (IEEE), Volume 63, 1975 (pages 1278-1308) This is a key area for investigation.

Mainframes

Most large repositories of data are stored on mainframe computers. On most mainframes in use in the government, a security access software operating system is used to protect access to the systems resources. The basic principle on which these products operate is to define system resources and then grant users or groups of users with similar access requirements, access to these system resources in a controlled manner.

The ANAO looks for a good access security regime with well structured and documented functions that address the agency's specific requirements.

The ANAO first needs to understand the agency's business. Second, it needs to understand what the computer systems are meant to achieve in relation to the business needs. This intelligence is gained from discussions with agency
management and an examination of corporate and business plans. Third, there is a need for the ANAO to understand the actual systems which are often quite complex. The audit team does this in a variety of ways, for example by running system reports, interrogating the system and examining the allocation of resources to various users. Statistical samples are taken of groups of users and a detailed analysis is done of the access rights verses the actual requirements for that sample.

On the other side of the equation, having set up the system, is there appropriate and adequate monitoring of the use of systems resources? Reports are run against system information to extract data from previous months, enabling a historical picture to be constructed. Systems are examined in detail including, access security, change control, application development, problem management (for example, error tracking) and business resumption planning, to name some of the areas investigated. Throughout an audit, agency staff are kept informed of progress and are consulted as a matter of course.

The ANAO has found that because mainframe systems have been in operation for many years, the systems are mature and staff generally have well developed specialist skills and know-how, and there is generally a good sense of discipline in the running and security of these systems.

The auditors examine policies and procedures to gain an understanding of how these relate to the business requirements of an agency. Explanations are sought for perceived problems and the audit team attempts to gain an understanding for the reasons behind agency decisions. Individual circumstances are weighed up and an opinion formed along with any recommendations the ANAO considers would improve the performance and the efficiency of the running of the systems in a cost effective manner.

**Midrange and PC/LAN/WAN Systems**

Midrange systems are also often referred to by their manufacturers names or by the operating system running on the particular machine. It is therefore not unusual to hear midrange machines referred to as UNIX machines. LAN/WAN systems are generally a collection of PCs linked together to form a network. These systems are often built around distributed, client/server or open systems. The definition of open in this respect is a matter for debate but not in this forum.

When compared to mainframe systems, there are generally not the security utilities available to secure satisfactorily these smaller systems. By nature, these systems are decentralised and are managed by few staff who tend to manage and control all of the functions on the systems. From a security point of view *Distributed and open systems create fertile soil for security hazards to develop.* Operating System Security for Midrange and Large Computers, Herman, Gary. *DataPro on CD-ROM*, April 1995
One of the main drawbacks of these kinds of systems is that staff are often required to undertake a broad range of duties minimising the opportunities for them to specialise. This leads to over reliance on the one or two system gurus which in turn creates potential control and security concerns.

What the ANAO looks for in these systems is the existence of a security regime involving mainly management of user access, password control, access control and monitoring arrangements. In the experience of the ANAO, these computer facilities tend not to be secured as well as mainframe computers, as I have previously noted. This trend from an audit point of view is of concern, as this is an expanding sector of the industry which meets the demands of an increasingly decentralised and devolved public service.

The Information Exchange Steering Committee (IESC) noted that:

*The security of client/server transactions being sent from the client across a network and completing at the server is a major concern for agencies.*  
Op.cit., Client Service Computing in the Australian Public Service (page 73). The section on security (5.6) from pages 73-77 is well worth a read.

The IESC went on to say that, while agencies are generally aware of the security management issues of distributed systems (such as LANs), client/server introduces the extra complication of transactions being held on workstations, even if only temporarily, particularly given security issues associated with client-based operating systems. One industry respondent argued that use of applications which store data on the client should be avoided where the data is subject to privacy laws.

The IESCs Security Guidelines Op.cit., (page 22) indicate that research shows that the main causes of data loss on client/server networks are as follows:

<table>
<thead>
<tr>
<th>Main causes of data loss</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee errors</td>
<td>50</td>
</tr>
<tr>
<td>Dishonesty</td>
<td>15</td>
</tr>
<tr>
<td>Disgruntled employees</td>
<td>15</td>
</tr>
<tr>
<td>Outside intruders</td>
<td>10</td>
</tr>
<tr>
<td>Physical threats</td>
<td>10</td>
</tr>
</tbody>
</table>

The Governments emphasis placed on stored data - on any platform - is made clear in the statement that *The Commonwealth considers that it is the owner of all*
information entered into any Commonwealth computer and this information must be treated and protected as any other Commonwealth asset.  Ibid, (page 5)

Networks

Networks audited by the ANAO vary from the extensive nation wide networks of the large departments to the LANs of the smaller agencies. Greater attention will be paid to security aspects of those networks with the wider adoption of electronic commerce. As you would be aware, the Government has decided to implement electronic commerce for purchasing by 1997 and has issued a Statement of Direction.  Electronic Commerce - Commonwealth Government Statement of Direction.  AGPS, Canberra,  

April 1995

The ANAO reviews the nature and extent of information that is transmitted on the network. This is evaluated against the level of protection afforded to that data. This is done by investigating the protocols of the networks, the type - if any - of encryption used and the security of computer equipment at various points in the network. The use and location of printers are also an important consideration. The ANAO reviews the security around computer rooms, backup storage sites and central printer, cheque and microfiche printing facilities. We will be interested in the development and implementation of an electronic signature which is intended to have the same role as an ink signature in terms of being unique, authenticable and not able to be easily repudiated.

Due to the complex nature of some of the larger networks, there are special facilities and utilities provided to network managers to help them troubleshoot the network. These utilities are very powerful and there is a risk they can be misused. Hence the ANAO looks at the security of these utilities as part of its network auditing program.

Client/Server computing

Today's trends toward open systems, client/server computing, and the blending of computing with communications are forcing management to focus on the trade-off in balancing adequate IT protection with end-user productivity and the expenses of administration and auditing security across a wide variety of computer and networking systems. Management needs to re-examine the business goals of IT security within their organisations. Even after clear and consistent security requirements are established, maintaining pace with the evolutionary trends for these new environments will require increasing commitment by all, from developers to end users.

Security is a set of system services that authenticate users, authorise their requests to use system resources, and audit the use of these assets. Most operating systems include basic features such as password security, but more sophisticated security is available through add-on modules that include features such as encryption to ensure that only authorised users access a system.
The advent of client/server computing has added new systems management requirements. Previously, all users accessed software running on a central computer. Because the application was central, a company could monitor who used the application and how it functioned.

As software spread to the desktop, new requirements emerged. Tools that deal with the distribution and tracking of application software are the newest and least-mature segment in the systems management arena. They include the following:

- asset management tools provide organisations with a tally of their hardware and software. They include features enabling an organisation to determine what model PC an employee has, with how much internal memory, and which software applications are loaded on it;

- help desk software packages became popular as PCs emerged. Clients often come across the same problem, such as how to delete text or access a database. Help desk tools provide technicians with information to walk clients through common problems. Although help desks have been around for many years, packaged software solutions are now available as client/server applications;

- performance monitoring is more complex in a client/server environment. Computing processes can take place locally or can be distributed to many locations within the network. Organisations need tools to determine how well devices perform on each step of the process;

- application performance monitoring is just beginning to become common. To date, vendors have focused on monitoring Database Management Systems, which often support client/server applications. Products for other areas, including applications monitoring, are emerging;

- software distribution packages move applications from a central computer to the desktop. For example, these tools may be used to send all customers a new release of a software package. Previously, an organisation either had to deliver software manually or mail it to each client, and often provide individual support to install the software successfully;

- a software licensing package sits on a server and hands out copies of an application to end users. If an organisation has a 20-user license, the licensing package denies access if a 21st user wants an application. The user has to wait until someone else finishes working with the application before being able to work with it;

- software metering products keep track of how often a package is used. These products will become more common as software companies begin to charge
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for how often software is used, as with electricity, rather than by the number of potential users;

· workload balancing occurs when more than one computer processes information. The balancing ensures that both systems operate at peak efficiency rather than forcing one system to do most of the work; and

· remote access products enable remote operation of a PC or server for diagnosis, troubleshooting, or reconfiguration.

Privacy Concerns

Turning now to privacy issues which are of major interest to the Parliament in particular. In part, this reflects the public's concerns about how organisations that collect information on individuals, such as the government, banks, credit reporting and credit card companies, might use or redistribute that information. Most electronic commerce financial reporting schemes are linked to the major banks or credit-card processing systems. When a credit card is used for purchases, a complete record of behaviour is left behind. In short, there is a quite effective audit trail particularly if the purchases are specified instead of merely being referred to as goods or services.

In the US, the federal government seemed likely to withdraw its proposal for the controversial Clipper chip data security standard in mid-1995, following protests after the standard was released in 1994. Business, privacy advocates, and the security industry opposed the Clipper chip, which had been proposed as a way to maintain national security interests. Even so, the growth of the Internet, on-line services, and electronic commerce has spurred increasing interest in the data security industry, and several chipmakers are developing encryption chips. Such chips included in a computer's motherboard or add-in boards would provide automated security. These chips work faster and are believed to be more resistant to tampering than encryption software. The US government, especially the National Security Agency, is revisiting the issue, and examining the idea of a commercial key-escrow system that incorporates both hardware and software.

Individuals in Australia have the right to complain to the Privacy Commissioner if they feel their privacy has been interfered with because of a breach of any of the eleven Information Privacy Principles defined in the Privacy Act 1988, or the Tax File Number Guidelines. In this regard it should be noted that an act or practice can only breach the Information Privacy Principles or Tax File Number Guidelines if it has occurred after 1 January 1989.

In his most recent report, the Privacy Commissioner has expressed concern regarding the 1995 report to the Minister for Finance by the Information Technology Review Group, Clients First. The report suggests that rather than extending the standards of privacy protection reflected in the Privacy Act 1988 to the wider community, they may be reduced:
These issues have surfaced wherever service levels have been enhanced by the use of information technology, such as banking and insurance, as well in the processing and validation of credit card transactions. It is beyond this Review's brief to define if and how views of individual privacy are being modified by such developments but, as standards of privacy change, the view of information held by the government is likely to be modified.

The current formulation of limiting the use of personal data to the purpose for which it was originally collected would render invalid many activities in retail banking, direct marketing and target selling. The Review Group believes that as community standards change, government information should not be placed in a special category that limits the potential to provide improved client service.


The constant threat of computer hackers gaining illegal access is well publicised. The nature of network protocols, which make sharing data and devices an easy and simple task, is crucial to distributed computing. However, hackers are using increasingly sophisticated tools, such as protocol analysers, network monitors and probes, and public domain security-probing packages, such as SATAN, Crack, and TCPdump. Hackers attempt to use these tools to defeat network security, monitor user activity, and obtain passwords, addresses, and other access codes, and ultimately, break into systems. Consequently, network managers are having to resort to increasingly complex countermeasures for better security. These include private- or public-key encryption to ensure confidentiality and the use of authentication systems and user access control devices as a stronger check of user identity. Most of the threats posed by mobile and distributed computing can be countered by a combination of committed management, common sense, user policy, and network security tools. One of the essential safeguards is to raise effectively the awareness of users of such threats and simple ways of dealing with them.

VI A COMPLEMENTARY RELATIONSHIP WITH INTERNAL AUDIT (AND EVALUATION)

Our overall aim is to establish a co-operative relationship with internal audit. In this way we can build on rather than duplicate the important work that internal audit does. Such a consideration applies particularly to systems development and operation.

Our relationship with audit committees is a very important element of this, as it is audit committees which generally have responsibility for overseeing and directing the work of internal audit within departments and agencies.

In building such a relationship it is necessary for the ANAO from time to time to review the operations of internal audit and, where appropriate, to suggest areas where improvement could be made. Perhaps, not surprisingly, this can result in a degree of tension between internal audit and the ANAO. To me, this simply
means that both parties need to establish an environment which promotes open consultation and dialogue and ensures that all parties are aware of the respective responsibilities of each other.

One way in which this can be promoted is the continuing use, where circumstances permit, of the involvement of internal audit in ANAO audit teams. Such an arrangement is clearly not always possible, or even desirable, but it is one which the ANAO, and I would hope agencies, are looking at on a case by case basis.

Another avenue worth exploring is the secondment of staff, on an exchange basis or otherwise, to the ANAO and vice versa. The ANAO sees secondments as a valuable professional development opportunity for staff and will continue to look for opportunities to second staff to outside entities for varying periods.

The ANAO has long been a very strong supporter of the need for a viable and effective internal audit function in the public sector. This is consistent with International Auditing Guideline (IAG 10) Using the work of an Internal Auditor, as well as with the Australian Accounting Research Foundations Statement of Auditing Practice (AUP 2) which states, inter alia, that:

*The external auditors general evaluation of the internal audit function will influence his/her judgement as to the likely use which may be made of the work of the internal auditor.*

The ANAO strongly believes that internal audit is an integral element of the internal control structure within agencies. Our overall aim is to establish a co-operative relationship with internal audit. In this way we can build on rather than duplicate the important work that internal audit does. Both audits should be more focused on adding value to the management process. A NSW Treasury publication last year argued that standardising audit methodology in line with best practice will ensure that internal audit effort is focused in the areas of higher strategic importance and higher risk. The publication went on to urge that the focus of internal audit should move towards a balance which involves a greater proportion of operational auditing as opposed to the current primary focus on financial accounting systems and financial compliance work. Operational auditing is much broader than the latter, focusing on an organisation's entire operating procedures and practices. The publication concluded that:

*Internal Audit should be able to reallocate resources to operational areas as the control environment improves.*  
*Statement of Best Practice - Internal Control and Internal Audit  NSW Treasury.  
Sydney, June  
1995 (pages 32 and 33)*

**Integrating Performance Audits and Program Evaluations**
In terms of making the best use of resources, the performance audit and the evaluation functions are integral to the accountability process and must therefore have regard to one another. They share reasonably common goals in that they are both fundamental links in the accountability continuum from inputs to outcomes, and both aim to better program management and accountability by looking at value for money, albeit from different perspectives, notably administrative versus policy effectiveness.

I can assure you that, in setting performance audit priorities, the ANAO does pay increasing regard to the programs of evaluations in agencies, and seeks to rationalise its coverage. The ANAO also has regard to other reviews being conducted whether by Parliament, by Committees, by independent Commissions or Bureaus or by other internal groups such as for Budget reviews. The continued improvement in Portfolio Evaluations Plans and Departmental/Agency Evaluation plans assists the ANAO in its preparation of its Audit Strategy Documents. The presence of both these planning documents improves the assessment of the coverage by evaluations and performance audits within each portfolio. That said, I do not consider that such an approach in any way undermines my independence. I do not seek to duplicate evaluation work. Indeed the two processes can be highly complementary, particularly if perceived as a continuum. However, if we see a gap in coverage, or the quality of work does not meet ANAO standards, then we would not feel constrained from looking at an area covered by an evaluation.

I have just mentioned ANAO standards. I wish to refer to two aspects of those standards in particular. The first is the external auditors independence. Independence adds credibility to a review process. Furthermore, independent people are more likely to ask the hard questions and press for answers, whereas there is always a risk that internal reviews may take too much for granted. I have suggested many times that program evaluations can benefit greatly by having at least one external party involved to provide an independent perspective. I have also indicated that, in my view, a quality evaluation is the best protection for a well performing program.

The second aspect I wish to mention is the issue of audit evidence. We are sometimes told that we do not really understand the program environment. Our response is that the requirement for evidence is a strong discipline and that there are many opportunities to consult in the audit process where evidence can be made known and views discussed. Put another way, there is a strong discipline in having to explain to an external person what you are doing and why. There is a lesson for auditors in this situation as well, as the following quote indicates:

> Unquestionably, what frightens auditors as they move from certification into value for money assessments, and within the latter from economy through efficiency to effectiveness, is the difficulty in satisfying normal professional standards of evidence and the increasing risk associated with the greater use of judgement as opposed to supportable facts. Auditing the Three Es: The Challenge of Effectiveness John Glynn, Andrew Gray and Bill
I would like to emphasise that evaluations are much more likely to be useful to users as well as to the ANAO if these standards were also to be applied therein. A poor evaluation is counter-productive and a waste of resources. A poorly oriented evaluation has the same outcomes. An example is the evaluation approach taken by Inspectors-General (IG) in the United States Government who were intended to help improve financial management performance. This approach is exemplified by the following comment:

*The more IG offices find mistakes, the more successful they are judged to be.* The Objectives and Performance of Performance Auditing: The Perspective of a United States Inspector General  Stephen A. Trodden, Inspector General, US Department of Veterans Affairs.

Symposium on Performance Auditing and Performance Improvement in Government. OECD

Paris, 6-7 June 1995 (page 2)

Not surprisingly the National Performance Revenue (NPR) led by Vice-President Al Gore concluded that this approach had a negative effect in some agencies. The most common effect was that managers were afraid to be innovative and deviate from prescribed practices because the IG would report them for non-compliance. A related effect was over-regulation since the IG audit reports tended to recommend more controls to ensure less deviation from prescribed practices. Thus we have a set of tensions which need to be resolved when we deal, for example, with financial management systems.

...the tension being experienced in the United States Government in the sense that management wants the flexibility to make decisions free from constricting rules and regulations and the ever-present fear of being criticised for non-compliance, while audit organisations are struggling with what the concept of flexibility really means. How much is too much? Where do internal controls and administrative safeguards become burdensome? What level of risk should an organisation be willing to take in the name of empowering government workers? Ibid., (page 3)

Resolution of any such tensions is a matter for all of us, including both the Executive Government and Parliament. Conferences such as this can make a considerable contribution to the thinking and approach in relation to management systems which may well be far more pervasive in their impact.

VII OVERVIEW
The ANAO seeks to be valued as a source of independent and apolitical audit assurance and advice to the Parliament and the community. Through the provision of professional auditing services and public reports we aim to assist public sector organisations in achieving their goals. Our accent has to be on the quality and integrity of those services and reports. That requires a total commitment to the personal development of our staff and the clear recognition of their contribution. The Office needs confidence in itself and its professionalism and demonstrated teamwork if it is to generate confidence and support from its various stakeholders.

The ANAO has in the past, and will continue in the future, to review aspects of the public sector reform agenda while continuing to be a strong supporter of it. I see no contradiction in this, noting that the need for accountability (by the ANAO and other review mechanisms) continues to be an integral part of those reforms. We recognise that the ANAO is central to assurances to the Parliament and the general public about accountability for the use of resources in the Commonwealth Public Sector.

In order to add value to a changing public sector administration, the ANAO must, both in its own management and in carrying out its audit program, contribute to and understand, the various reforms and other improvements which are an integral part of the environment in which we operate. We have to develop a good knowledge of that environment. That includes having a better understanding of the business of individual agencies and entities. We will aim to communicate better with all our stakeholders. Our policy will be one of no surprises.

Some might be inclined to suggest that the notions of adding value and performing an audit function are mutually exclusive, basically because of a perception that audits are about telling where you have got it wrong or, worse still, about nit-picking criticisms. There will undoubtedly be many occasions where the ANAO identifies areas where improvement is considered necessary and, indeed, hopefully in only a few instances, where performance is poor or even unacceptable. Our emphasis will be on remedying those situations. The ANAO will not have all the answers. But together we may well have.

I consider the mandate of the Australian National Audit Office provides a unique opportunity for it to contribute positively to the development, operations and performance of the Commonwealth public sector - in other words, adding real value to public administration. In this forum, that relates to financial management involving the use of technology in particular. That is my message to ANAO staff and a challenge for the Office in the immediate and foreseeable future.

Reporting for Better Performance

Real accountability comes with openness or transparency. This is a discipline on governments as well as on the bureaucracy. Transparency largely occurs through public reporting. It is the most tangible indication of our performance. And it is in our reports that we can add considerable value to public management. If we are to continue to be successful in adding value the ANAO must ensure that all its
reports are objective, fair and balanced, but above all, are presented in such a way as to facilitate, or be a catalyst for, improved performance. Putting aside for the moment the difficult question of how one measures improved performance as a result of an audit report, I consider that for the most part at least, improvements are generated where management and the ANAO can agree on the recommendations flowing from an audit. It follows that improvements in performance and accountability are less likely to occur where there are differences, particularly fundamental differences, between the ANAO and the department or agency which is the subject of audit.

As mentioned earlier, I am committed to ensuring that the ANAO will be placing increasing emphasis on identifying areas of best practice, as well as noting areas where, in our opinion, improvements can be made or are necessary for good management.

**Relating to Other Stakeholders**

Other than Parliament, our major stakeholders importantly include agencies. We need to complement their accountability processes. We can do this in a number of ways which I will illustrate.

As alluded to earlier, the ANAO is committing more and more of its resources to identify areas of best practice as well as identifying those areas where improvements in administration are required. Best practice guides on topics as diverse as financial management, grants administration, internal audit, and the sale of Commonwealth assets, have been produced by the ANAO. In my view, it is by focusing our attention more on best practice models and ways that administration can be improved, rather than simply highlighting areas of deficiency that the ANAO can be of greatest assistance to management, the Executive and the Parliament alike.

Public reporting, particularly in an audit context, is a tricky business. Someone once observed that you are only as good as your last game (or in our case, your last report). While I am not sure that is in fact the case, it brings home an important point that the ANAO must ensure that all its reports are objective, fair and balanced, but above all, are presented in such a way as to facilitate or be a catalyst for improved performance.

Whatever the perceptions in the past, I am committed to ensuring that the ANAO will be placing increasing emphasis on identifying areas of best practice, as well as noting areas where, in our opinion improvements can be made or are necessary for good management. The areas of systems developments, internal controls, financial reporting and corporate governance are good illustrations where the ANAO can add considerable value to better performing public sector management. The move to accrual reporting, the realisation of the need to support that requirement with accrual based accounting systems (particularly if a decision is taken to adopt accrual budgeting) and the likely introduction of whole of government accrual reporting accentuate that role.
The importance of other resources varies across entities but few would doubt the growing significance of our information assets. Best practice in accessing and using information is rapidly being provided by technology. That technology is basically communications and computing. It is an area that has often been avoided by managers in the past. Unfortunately with our growing dependence on this asset for strategic management and delivery of program outputs and outcomes, many managers have abrogated much of their responsibility, either by default or by intent, to their computing/communications staff. However, this situation is changing with the growing awareness of its strategic and operational importance to the business, the increased computer literacy of staff generally and the greater user friendliness of the systems and applications for accessing and manipulating the data. For managers, the availability of executive or decision support systems literally provides required information at their fingertips. Information has suddenly become useful and in high demand. So much so that management's attention is now being focused on its integrity and security. Within our limited resources, the ANAO can provide some assurance at the systems development stage about effective internal controls and guidance on security aspects. I stress this is yet another area in which we are all having to learn quickly and mutual benefits will flow from shared experiences. This extends into the area of privacy, particularly where, for example, data matching techniques are used.

In my view, the public sector has significantly grown in coverage of community issues and in complexity. Successive Governments have been concerned to constrain their budgets and keep the federal sector around a quarter of gross domestic product. Undoubtedly, this has placed considerable pressure on public service managers to provide better resource management. Again, in my opinion, they have done so - as is also evident from many audit reports. The resource management framework has survived a fairly critical decade which initially saw it as a passing fad but now regards it as the way to do business. The ANAO has to contribute to the further development of that framework from its across the service perspectives and, in particular, by identifying, reinforcing and disseminating better or best practice. In that respect, we have to get our own house in order, including learning from our colleagues elsewhere in both the public and private sectors. This applies particularly to the way in which we manage our resources. Increasingly we are becoming more dependent on technology to do so. As in the past, decisions about the functionality of IT systems will be important but even more important will be that we assure that all of us make cost effective use of that functionality. We will add value by mutual support and sharing of information and experience. The Australian community can expect no less of us.