E-GOVERNMENT AND
JOINED-UP GOVERNMENT

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I INTRODUCTION

e-Commerce… e-Banking… e-Procurement… e-Government…

While it may seem fashionable at present to place an ‘e-’ before a traditional descriptor to indicate that the function or service is delivered electronically, very soon the electronic delivery channel will be ubiquitous and the ‘e-’ will disappear from the vernacular. Consumers of services which can be delivered electronically will expect electronic delivery channels and, if they are to be relevant in the digital future, service providers will be obliged to offer electronic delivery channels as basic elements of their general service delivery strategies.

Governments, as service providers to their citizens, are not immune to these pressures and demands. At the beginning of the 21st century, governments around the world find themselves equipped with more tools to provide services to their citizens than at any other time in history. The digital revolution, including the Internet and other rapidly emerging information and communication technologies (ICT), is changing the way people live – in particular, the way they communicate, work and conduct business. And these technologies are influencing the way in which governments interact with citizens, business communities and with other levels of government, both nationally and internationally.

This paper seeks to explore some of the issues associated with governments’ increasing use of ICT, and the Internet in particular, to support electronic service delivery; to exploit the potential of e-government; and to position themselves to deliver joined-up government services to their citizens and business communities. The paper will consider the drivers behind the growing attention to e-government and joined-up government, and discuss some of the tensions which are brought into sharper focus in a joined-up environment – chief among these being the issue of ascribing responsibility and accountability for the realisation of shared outcomes and, in some cases, shared outputs. Considerations of outputs and outcomes have generally pervaded government thinking about who is responsible, and accountable, for what.

The paper will also consider the implications of the growing prevalence of partnerships within and between levels of government and with the private sector, in particular through the use of ICT. As auditors, we have a special interest in identifying and assessing the changes in governance and accountability frameworks which e-government, in particular, will influence in quite profound ways in the future. I will endeavour to explore the changing nature of relationships involving governments and their partners and highlight some areas of resulting interest for auditors which we might wish to discuss.
II E-GOVERNMENT AND JOINED-UP GOVERNMENT

What is e-government?

Many countries have developed their own definitions of, and approaches to, e-government. While they might differ in the detail, they all share one theme – the nexus between information technology and the delivery of government services.

Most definitions associate e-government with the use of the Internet as a vehicle to deliver government services to citizens and to interact with the business community. As this meeting of the Global Working Group is being held in New Zealand, we might well start with our host’s definition.

The New Zealand e-Government website (www.e-government.govt.nz) makes the following comment on e-government:

_E-government will enable people to use digital technology to find and use New Zealand government information and services._

_E-government means people will be able to access all government departments and organisations through one website on the Internet, regardless of physical location or the time of day._

_E-government is a technology enabled, sector-wide, cultural, organisational and business transformation programme – it is not a massive Information Technology project._

In Australia the Government Online program, administered by our National Office for the Information Economy (NOIE), recognises that:

_Getting Government Online is a natural and important step in the development of government and community interaction... The Government must develop more and better services online – integrated services that break down the barriers of government structure and jurisdiction, and services that meet the real needs of individuals and business._

At its simplest, e-government could involve the electronic (Internet) delivery of a transaction traditionally accomplished by means of an exchange of paper-based correspondence or a physical visit to the office of a government department. Yet the above descriptions of e-government envisage providing electronic (Internet) access to sector-wide or integrated government services. The Government of the United Kingdom (UK), widely regarded as one of the leading players in this field, has coined the term ‘joined-up government’ to highlight its intention to deliver more than a simple electronic mirroring of traditional government services.
Joined-up government

The UK Government white paper *Modernising Government* outlines a vision for Britain’s use of information technology in delivering government services.

Information Technology (IT) will:

- make it easier for businesses and individuals to deal with government;
- enable government to offer services and information through new media like the Internet or interactive TV;
- improve communications between different parts of government so that people do not have to be asked repeatedly for the same information by different service providers;
- give staff at call centres and other offices better access to information so that they can deal with members of the public more efficiently and more helpfully;
- make it much easier for different parts of government to work in partnership: central government with local authorities or the voluntary sector or government with third-party delivery channels such as the Post Office or private sector companies; and
- help government to become a learning organisation by improving our access to, and organisation of, information.2

Many governments have set targets for electronic service delivery, and in particular for the delivery of government services online, for example, Australia, Singapore and Ireland by 2001; Japan and USA by 2003; Canada by 2004; UK, Germany and China by 2005.5

A number of factors are driving governments’ move to an online environment. Typically, governments claim that their strategies for ‘going online’ focus on better services for citizens and business and more effective use of the government’s information resources. Governments have recognised the potential of using the Internet as a service delivery channel. There are potential savings of service delivery costs if online services are taken up by a significant proportion of citizens and business as an alternative to the more resource intensive traditional delivery modes such as face to face contact and correspondence.

More individuals in the community are gaining access to Internet technology and, as this number increases, the demand for government services over the Internet can be expected to increase dramatically. As well, a growing number of citizens and businesses have developed the skills to effectively interact online – they e-mail friends, book travel, buys goods and services and conduct their banking and personal finances online – from home, at work, while travelling and at times convenient to them. Such experiences raise the expectations of individuals, that is, they will want the same type and level of service from government as they receive from the private sector, virtually on demand.
In promoting a joined-up approach to e-government, the UK government cites four guiding principles: building services around citizens’ choices; making government services more accessible; social inclusion; and using information better.

The focus on the citizen as service recipient is common to many countries’ e-government strategy which rests on the premise that:

People should not need to understand how government is organised or to know which department or agency does what, or whether a function is exercised by central or local government.4

There is now widespread acceptance of the proposal that e-government, and joined-up government in particular, will result in significant benefits for citizens, businesses and governments. The UK Government has identified a number of benefits for different groups of people as indicated in Table 1.

Table 1 – e-business benefits

<table>
<thead>
<tr>
<th>Public sector transactions with</th>
<th>Examples</th>
<th>Benefits</th>
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<tbody>
<tr>
<td>Citizens</td>
<td>Information</td>
<td>Wider choice of channels, convenience, lower transaction costs, more personal service, greater awareness of services and policies, greater democratic participation and openness.</td>
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<td></td>
<td>Culture</td>
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<td>Health</td>
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<td>Education</td>
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<td></td>
<td>Benefits transactions</td>
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<tr>
<td></td>
<td>Taxation</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>Support programs</td>
<td>Quicker, faster interactions, reducing transaction costs and the regulatory burden.</td>
</tr>
<tr>
<td></td>
<td>Advice and guidance</td>
<td></td>
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<tr>
<td></td>
<td>Regulation</td>
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<tr>
<td></td>
<td>Taxation</td>
<td></td>
</tr>
<tr>
<td>Suppliers</td>
<td>e-procurement</td>
<td>Reduced transaction costs, better inventory management, shared data environments.</td>
</tr>
<tr>
<td>Other public sector bodies</td>
<td>Communication between departments and agencies and between central and local government</td>
<td>Greater accuracy and efficiency, reduced transaction costs. Better use of the knowledge base. More nimble, flexible working arrangements.</td>
</tr>
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<td></td>
<td>Policy making</td>
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The realisation of joined-up government services will require considerable cooperation across departments and across levels of government in order to deliver transparent, customer-focused solutions. These challenges will be explored in the next section of this paper.

The move to a more networked or joined-up government

The Australian Government’s strategy for moving to a more networked provision of services is outlined in the Government Online agenda. Government Online highlights eight key strategic priorities - the first of which is that government agencies should take full advantage of the opportunities provided by the Internet. Government Online proposed that individual agencies are best suited to determine which services and applications should be placed online. All agencies are required to produce and publish an Online Action Plan.

A coordinating role is played by the National Office for the Information Economy (NOIE), which has established a formal reporting framework designed to permit a whole-of-government assessment of agencies’ progress in achieving the objectives of Online Action Plans.

The second strategic priority is to ensure that technical enablers are in place to support a more networked delivery of government services. Matters of privacy, security, authentication and standards, including metadata standards, are addressed under this priority, along with accessibility and electronic publishing standards. Government Online recognises that consumers of online services must have confidence in the systems they will use; that their privacy is protected; and that the security of their transactions with government will be assured. Government agencies need to employ systems which are compatible and capable of supporting a greater sharing of information.

The Australian Taxation Office operates a secure Electronic Lodgement Service which enables registered tax agents to lodge tax returns for their clients. Currently in excess of 97 per cent of all income tax returns prepared by registered tax agents, are lodged via this service. Most recently, the Tax Office developed e-tax, a software package for the use of individual taxpayers who prepare their own tax returns. Completed e-tax returns are digitally signed, using built-in public key technology, and are then encrypted prior to transmission to the Tax Office over the Internet using a secure (SSL) link.

Also secured by a public key infrastructure is the Tax Office facility for businesses to conduct transactions over the Internet, including the lodgement of Business Activity Statements and a range of ten transactions relating to employee superannuation.

Another key strategic priority is to facilitate cross-agency services, that is, to join up government services. Many agencies are already aware of a cross over of service provision with other agencies and have moved to an electronic solution to providing a seamless service to citizens and business. The joint clearance system of the Australian Customs Service and the Australian Quarantine Inspection Service is one example. As early as 1972 Customs automated its system for the lodgement of
Customs import entries. By 1976, electronic access had been provided to importers and brokers for the lodgement of those entries. Through the 1980s and early 1990s Customs broadened the range of online transactions to encompass export activities and cargo reporting. Electronic Funds Transfer was introduced in 1990 for the payment of duties.

By 1993, the system had expanded to include the joint management of entries with the Australian Quarantine and Inspection Service. The take-up rate on online transacting has been such that nearly 100 per cent of all transactions related to the clearance of imported and exported goods are now being performed online. Customs is currently redeveloping its systems so as to deliver a secure Internet based approach for transactions with the trading community, scheduled to go live in 2002.9

NOIE can also play a coordinating role by scanning agency Online Action Plans to identify potential synergies involving agencies which have not necessarily worked closely together in the traditional service delivery sense. Any decisions to collaborate would, of course, be up to the particular agencies involved.

Due to Australia’s geography and population distribution, the provision of government services in rural and regional Australia is another strategic priority. As government is a major user of online technologies, and expects to expand that use even further, the active involvement of the IT industry in Australia is also a priority, not only to help ensure an efficient and effective outcome but also for industry development and international competitiveness reasons.

In moving to a more joined-up government, and in order to realise the full potential of electronic delivery of government services, it is clear that a comprehensive strategy and a clear vision for the future are essential. Australia is certainly not alone in adopting a strategic approach to achieving joined-up government. This should help to ensure a more robust, efficient and effective operational implementation.

The UK strategy recognises that planning for improved electronic service delivery offers an opportunity to break down departmental boundaries and to alter the silo-based delivery modes associated with government departments and agencies acting independently. A fundamental principle of joined-up government is that citizens needing or wishing to interact with government should be able to do so whenever they choose. Citizens should not need to understand the way in which government is structured in order to secure the services they need, nor should they necessarily have to deal with any number of government departments in order to progress a particular course of action.

In response to these drivers, many governments have adopted a new approach to packaging government services, organising these around life events. In the State of Victoria the NEC maxi system10 is organised around such life events as turning 18, getting married and moving house. For a young person turning 18 years of age, it provides information on an adult’s rights, responsibilities, entitlements and obligations as well as connecting to government sites which enable a user to enrol to vote; book a driving licence permit or test; apply for a passport; obtain a tax file number or lodge a tax return; and search for government information on study assistance or employment assistance.
In Singapore, the www.ecitizen.gov.sg website offers a comprehensive range of government services relating to business, education, health, housing, family and so on. The site also presents a number of community portals, targeted at teenagers, working adults and senior citizens. These portals provide easy access to the types of government services usually called upon by a particular group of individuals. The UK citizen portal\textsuperscript{11} also presents information and services arranged around life episodes – ranging from having a baby to dealing with pensions and retirement.

**The varying sophistication of government Internet sites**

In 1999, the ANAO conducted a performance audit of electronic service delivery, including Internet use, by Commonwealth Government agencies.\textsuperscript{12} That audit, based on a survey of 66 Commonwealth agencies, identified four stages of electronic service delivery through the Internet:

- **Stage 1** is a website that publishes information about the agency and its services to all Internet users – this is the so-called ‘static website’;
- **Stage 2** allows any Internet user to browse and interact with the agency’s database or databases – permitting users to provide certain parameters and then extract tailored reports and packages of information;
- **Stage 3** includes the first two stages and permits users to enter information on the website, exchanging or transacting secure information with the agency – including the payment of monies or lodgement of statutory forms; and
- **Stage 4** is the same as stage 3 but, in addition, the agency, with the user’s prior approval, shares that information with other government agencies.

These stages are illustrated in the following figure, reflecting their relationships in terms of functionality/service delivery and sophistication of technology used.

*Figure 1 – ANAO model of service delivery by the Internet*
The survey identified that, at the time of the audit:

- 52 percent of Australian government agency websites were at stage 1;
- 25 percent were at stage 2;
- 21 percent were at stage 3; and
- 2 percent were at stage 4.

There is no inference that stage 4 is inherently better than stage 1. It is a question of what is the appropriate level of service delivery for the particular agency seen in the light of the outcomes to be achieved and the risks involved. However, in the world of joined-up government, if agencies are to integrate their services and provide a customer-centric focus, stage 4 websites are more likely to provide the technical infrastructure required to achieve that goal.

In the field of public health, a government agency called the Health Insurance Commission (HIC) manages and operates the Australian Childhood Immunisation Register (ACIR). The ACIR enables registered immunisation providers and approved Internet clients to view a child’s recorded immunisation history; request information; record immunisation services; and monitor medical insurance claims lodged under their provider number. Parents may request a copy of their child’s immunisation records (although not online at present) to ensure their child is fully immunised.

The HIC also operates the Australian Organ Donor Register, launched in November 2000. The Register records the status of intending donors, participation in which is voluntary. Individuals can register in person; download a registration form from the Internet; or register completely online. Information recorded on the Register is available via a secure Internet site to state based organ donor registers and authorised medical personnel in the organ donation network.

The ACIR and the Organ Donor Register are examples of Stage 3 websites, and while designed to share information among users, neither site looks to share information across other government departments. Indeed, the HIC is required to maintain a strong focus on privacy and security to prevent the use of any information for any purpose other than for which it was originally obtained.

Stage 4 activity in the online evolution is more likely to be found in association with the use of portals, which I will now go on to explain in some detail.

**The role of portals in delivering joined-up government**

As online services expand and governments move closer to the one-stop-shop model of providing information and conducting transactions online, user expectations will continue to increase, bringing pressure to bear for a fundamental change in the philosophy of government service delivery, that is a change to customer-centric service.

Online portals offer a single entry point for citizens to access integrated services and information for all of a government’s departments. The adoption of portals as
vehicles for delivering integrated services demanded by citizens and the business community reflects such a transformation of the enterprise of government. Enterprise transformation has been defined as government re-organising and re-deploying itself to meet customer demands in the most efficient manner. Central to these changes are business process re-engineering and the use of human resources and technology to better support modernised service objectives.

According to Deloitte Research, 70 percent of governments have undertaken business process re-engineering in the past two years, and are positioning themselves to be portal-ready, so that value to citizens and government might be maximised. Realising value is central to government investing in technology to support e-government. The Department of Natural Resources in the State of Victoria eliminated paper costs from its procurement operation in favour of cheaper electronic documents. The US State of Arizona put its vehicle registration process online and reduced typical transaction times from 45 minutes to 3 minutes. These online initiatives clearly deliver value to the government and to the citizen.

Citizens receive the greatest value when they can complete a process entirely through one portal, rather than being able to proceed only so far and then having to engage another service channel such as telephone, mail or an office visit. Governments can derive significant value from connecting portal services to integrated databases behind the scenes, and so enhance the management of client/customer information and its use.

Use of portals in Australia

Appendix 2 provides a description of the Australian Government’s portals framework, administered by NOIE. It also describes a trial project operating in Tasmania. Below are some brief examples of portals established by Australian governments. Further details of selected portals can be found at Appendix 3.

In terms of frequency of use, many of the government services regularly called upon by citizens are delivered by State and Territory or Local Governments.

Commonwealth Government’s Business Entry Point

http://www.business.gov.au

The Business Entry Point (BEP) initiative is aimed at providing online access to information and services associated with starting and operating a business in Australia. BEP covers taxation compliance issues as well as business licence applications and the BEP site incorporates information from three levels of government – federal, state and (some) local councils. All State and Territory Governments participate in the BEP initiative.

A key feature of the BEP site is the Australian Business Register (ABR) Online. The ABR is a publicly available database containing a subset of information provided by businesses when they register for an Australian Business Number (ABN). The site permits users to search the ABR; apply online to the Australian Taxation Office for an ABN; and change ABR details. Registration for other taxation matters such as the Goods and Services Tax, Equalisation Tax and Luxury Car Tax is also supported.
The BEP presents users with the opportunity to view a large number of case studies and/or explore the answers to many common business questions.

Originally developed by the Commonwealth Department of Employment, Workplace Relations and Small Business, the site is now co-ordinated and hosted by the Department of Industry, Tourism and Resources. In terms of governance, the BEP initiative has established a number of formal committees drawing membership from government agencies and Australian industry. The BEP Steering Committee provides a high level, decision-making forum. A Commonwealth Consultative Group coordinates activity in relation to Commonwealth agencies involved in BEP, while the State Territory and Local Government Consultative Group deals with issues relating to integration across levels of government. A Business Consultative Group advises on the business requirements of the site, including those relating to privacy, security and authentication of transactions. Each of the Consultative Groups presents recommendations to the Steering Committee for decision and subsequent action.

Integration is a high priority for the BEP initiative. A Transactions Management Module can store user profiles for repeated use and call on this information to pre-fill compliant transaction requests for users. It can also collect and execute a series of individual transactions for users and provides an ongoing record of both complete and incomplete transactions.

The BEP initiative incorporates a Demonstration Program, designed to assist agencies (at any level of government) to develop innovative technologies, making it easier for business to interact with government. BEP also provides seed funding for some projects and the BEP site links to projects already operating. For example, the Penrith City Council established a Building and Development Application online lodgement system, seamlessly covering local and State government requirements - contained in separate pieces of legislation, administered by separate departments. Other local government authorities are currently installing or considering the ‘Penrith solution’.

**South Australia Central**
http://www.sacentral.sa.gov.au

The South Australian Government has established a 24 x 7 government service portal based around twelve channels including business, employment, health, education, banking and finance, shopping and classifieds and tourism and travel. Within each channel, the user has an opportunity to access a range of government information and services and navigate to other service provision websites. Links provide access to electronic bill payments and government transactions, such as government tenders and contracts, assistance with student housing, consumer affairs, registration and licensing.

**Service Tasmania**
http://www.service.tas.gov.au

Service Tasmania presents a website strategy organised around particular service channels such as change of address, payments to government, purchases and access to information, as well as portals for families, people with disabilities, seniors and selected life events, such as having a child.
Operating in conjunction with a series of Service Tasmania shops, the site has the capacity to delivery a range of online services, but also integrates some back office activities, for example, changing an address. Online, the user can enter change of address details that will, for example, flow to electoral enrolment details at the federal, state and local levels. At a Service Tasmania shop, one change of address form will result in details flowing through to driver’s licence, motor vehicle registration, student bus passes, housing, seniors card, library card and electoral enrolment. The Service Tasmania initiative also presents a facility to make payments to government via Interactive Voice Response (IVR) telephone.

Service Tasmania also links directly to some services provided by the federal government’s Commonwealth Service Delivery Agency, Centrelink. Appendix 2 includes an outline of the Commonwealth Government’s TIGERS project, currently under way in Tasmania. It could be seen as a trial demonstration project that can be adopted by all tiers of government.

III THE ‘E’ IMPACT ON CHANGING GOVERNANCE FRAMEWORKS

Changing governance

Over the past decade in Australia, at the federal government level at least, public sector management has seen a shift from central agency control to a framework of devolved authority with enhanced responsibility and accountability demanded of public sector agencies and statutory bodies. Intended to position the public sector to manage and respond better to new challenges, the public service, financial and workplace legislative reforms, which are principles rather than processed based, have provided many opportunities for enhanced performance and accountability across the public sector.

We now have a contemporary legislative framework in place including the:

- Financial Management and Accountability Act;
- Commonwealth Authorities and Companies Act;
- Public Service Act; and
- Workplace Relations Act

Central to the new legislative framework is the clear responsibility of Chief Executive Officers/heads of public sector agencies for promoting the efficient, effective and ethical use of resources. Chief Executives now carry more responsibility than in the past both due to the legislative changes and also because of the devolution of authority to agencies from the coordinating agencies for a wide range of personnel, workplace relations and financial management functions.

The Commonwealth Government has also introduced an accrual-based performance management framework focused on outputs and outcomes. The first full accrual budget was implemented in 1999-2000. Key components of the new framework are as follows:
• agencies are to specify the outputs they will deliver and describe the planned government policy outcomes to which the outputs will contribute;
• specifying outputs will involve identifying price, quality and quantity and other key attributes;
• specifying outcomes will involve providing performance information on the achievement of planned outcomes and the contribution of outputs and administered items to those outcomes; and
• there will be a clear distinction between outputs produced by agencies and over which they have control, and items they administer on behalf of the government.

The framework is designed to assist agencies to decide and manage what should be produced and at what price; assess how well it is produced; and how it contributes to the government’s planned outcomes. It should also support government decision-making in the Budget process, and provide information to Parliament and other stakeholders in a form that enables clear transparency and fulfils all accountability obligations. Above all, the framework should support improved resource management by agencies and their Ministers. Specifying outcomes and outputs, and managing finances on an accrual basis, is intended to provide:

• a clear understanding of what is expected to be achieved;
• a clear understanding of the full costs of providing goods and services;
• information required to actively manage the financial health of agencies;
• flexibility in organising agency resources to deliver goods and services; and
• a sound information base for advising stakeholders on priorities, on what is produced, and on what is being achieved.

A number of tensions are brought into focus between such a devolved management environment and that required to implement a more joined-up delivery of government services to citizens and the business community. Virtually all of the results envisaged in e-government and joined-up government require the coordinated efforts of two or more agencies or levels of government. Yet the devolved environment, with more of a silo-based mentality, does not easily provide for a smooth transition to a more joined-up future. The following observation is apt in this respect:

_The departmental model cannot live in an inflexible and watertight compartment world. We must find ways of doing things in a horizontal and collaborative fashion, and work beyond departmental boundaries. We’re trying, we’re learning, we’ve still got a long way to go._

It has been recognised that there needs to be a change in public service culture to deal with such transitions. A paper commissioned by the UK National Audit Office addresses the issue of cultural barriers to e-government, particularly to the adoption of a more networked approach to government service delivery. The paper also recognises that not all barriers to the development of e-government come from within government. Importantly, there must be clear citizen benefits in what is being offered electronically by governments, not only in terms of ease of use but also taking into
account the transaction costs of changing to the new mode. The paper addresses issues of incentives for change, for both agency staff and citizens, to participate in e-government initiatives.

... to make innovations acceptable to citizens, government organisations have to develop ways of understanding how citizens use the Internet, what they use it for, what underpins societal myths about technology – and what innovations could be 'domesticated'.19

**Network Bureaucracy**

The move to an output/outcomes framework for budgeting, managing resources and measuring performance at the Federal Government level has stimulated some discussion about ‘shared outcomes’ and the strategic and other relationships between outputs that contribute to those outcomes and those organisations responsible for both.

There are increasing indications of a re-emergence of interest in the concept of ‘network bureaucracy’ as a means of delivering more efficient, effective and responsive public services, particularly in the electronic service delivery field. For example, it has been commented that:

*While the market form of organisation is thought by its proponents to excel at certain types of cost containment, and is a favoured means for terminating old programs, it is less certain that it is able to build new systems of quality service delivery and to create effective institutional linkages within policy sectors. Network advocates have begun to suggest that the competitive market bureaucracy may not mobilise support, share information successfully, invest in new technologies, create common service standards, and focus upon the individual needs of suppliers and clients.*

*Furthermore, it is suggested, markets may undervalue the rights of individual clients when the cost of difficult clients is higher than the benefit to be gained from “creaming” only the better priced customers.*20

The network bureaucracy concept proposes interdependence as a binding characteristic where services are tailored to individual or small batch clients and costs are shared across an inter-organisational web of co-producers. Network agents are the local officials who take direct responsibility for establishing effective links between suppliers, co-producers and clients/customers (that is, citizens).

In Australia, there are indications that the network bureaucracy concept is gaining favour as a means of delivering more responsive public services to citizens. For example, one recent ANAO report21 discussed how three welfare agencies were defining their particular outcomes and outputs and how the outputs of one of these agencies were directly related to the outcomes of the purchasing departments. These arrangements have subsequently expanded such that a particular agency, Centrelink, now delivers welfare and other services on behalf of some 15 to 20 agencies under formal purchaser-provider arrangements.22 As yet, there is little integration of services or sharing of information between the various agencies purchasing services from
Centrelink. The use of a purchaser-provider model to deliver shared outcomes is raising interesting governance, as well as accountability/responsibility, issues for the Board and senior management.

It has been recognised that more networked approaches to service delivery envisage more sophisticated and cooperative approaches to cross-cutting issues and, consequently, stress the importance of partnerships, coordination and joint working. This is increasingly occurring at the inter-agency level. Therefore, networking can be expected to evolve to include strategic arrangements and structures between public organisations, private operators and voluntary associations as well as individual clients and the community generally. Such interaction should in turn generate new forms of service delivery and redefine the relationship between government and the community.

This approach reflects many of the characteristics identified as essential for a successful move to e-government. Governments will increasingly become involved in partnerships, drawing on the skills base (and in the case of e-government, the ICT skills base) necessary to design and deliver Internet portals which cut across content boundaries and traditional organisational silos.

Realising the benefits of networking in a cross-cutting mode requires further cultural transformation in government agencies. For example, hierarchical management approaches may need to yield to more ‘partnering-type’ approaches. Process oriented ways of doing business will need to be supplanted by results-oriented ones. Consequently, there is a need for government agencies to become better integrated organisations as well as being more externally focused if they are to meet the needs and expectations of their ultimate clients. This places considerable pressure on individuals and information systems to facilitate successful operations and outputs, as well as outcomes.

The following observation has been made in relation to the American environment:

> Along with other facets of public management, managers who deal with the federal system have entered the information age through expanded contacts and networks. While bureaucracy was the hallmark of the industrial age, interorganizational teamwork and networks are the hallmark of the information age.23

The advent of the Internet and other communication initiatives has added to pressures to operate across organisational boundaries to provide greater flexibility, cooperation and responsiveness within and between the public and private sectors. Working across organisational boundaries will also put considerable pressure on managers to identify clearly both responsibility and accountability for outputs and outcomes. In addition, it requires a re-examination of the corporate governance framework for activities that go beyond organisational boundaries.

In short, as with joined-up government in the United Kingdom, accountability for performance applies both within an agency and across-agencies. A peer review report of the Cabinet Office role in Modernising Government offered the following comment on the corporate role of Permanent Secretaries:
Permanent Secretaries have an individual and a collective responsibility. An individual responsibility to serve their respective ministers, to oversee the performance and ongoing improvement of their department. They also have a collective responsibility to serve the government as a whole by supporting and moving forward the government agenda. They have a collective responsibility to modernise the Civil Service as an institution and to ensure that it is up to today’s challenges.24

The same report expressed the opinion that joining-up must start at the centre of government:

Joining up is a mind-set and a culture. It is not a system or a structure. The concept of joining up recognises that no one has all the knowledge and resources, or controls all the levels to bring about sustainable solutions to complex issues.

The key to joined-up government is to learn about shared purpose, teamwork, partnerships and building relationships. Joined-up organisations are built around the knowledge and know-how of people. This differs from the organisational model of the past which was built around tasks, units and titles.25

In Sweden, the government ordinance which sets out Ministerial responsibilities also formally sets out the obligations on Ministries to consult other named Ministries in developing activity in their assigned areas. Decisions cannot be taken without agreement of the named Ministries. It is claimed that co-ordination employing this model is more commonly used than central co-ordinating machinery, such as cross-departmental committees.26

**Governing corporately for results**

In any arrangement where there is joint responsibility for overseeing and implementing programs across a number of bodies, involving public and/or private sector organisations, a clear governance framework and accountability and reporting arrangements, which clearly define roles and responsibilities of the various participants, are essential.

In simple terms, corporate governance is about how an organisation is managed, its corporate and other structures, its culture, its policies and strategies, and the ways in which it deals with its various stakeholders. It is concerned with structures and processes for decision-making and with the controls and behaviour that support effective accountability for performance outcomes/results. Key components of corporate governance in both the private and public sectors are business planning, internal controls including risk management, performance monitoring and accountability and relationships with stakeholders. E-governance calls for a similar type of framework in a networked environment.

Accountability in the areas of community service obligations, equity in service delivery and a high standard of ethics within a legislatively-based values system, are
particularly critical to public sector agencies working in concert to deliver joined-up services.

Attention to the principles of corporate governance in this context requires those involved:

- to identify and articulate their responsibilities and their relationships;
- to consider who is responsible for what, to whom, and by when; and
- to acknowledge the relationship that exists between stakeholders and those who are entrusted to manage resources and deliver outputs and outcomes.

A sound e-governance framework will also provide a way forward for those who find themselves in somewhat different relationships than they have usually experienced when operating in a more independent manner in an environment of devolved authority.

In the last decade, Australian Public Service (APS) agencies have put in place many of the elements of good corporate governance. These include corporate objectives and strategies; corporate business planning; audit committees; control structures, including risk management; agency values and codes of ethics; identification of stakeholders; performance information and standards; evaluation and review; and a focus on client service to name just a few. However, too often these elements are not linked or interrelated in such a way that people in the organisation can understand both their overall purpose and the various ways the various elements need to be coordinated in order to achieve better performance. These linkages are necessary to ensure that a mutually supportive framework is produced that identifies outcomes for identified stakeholders and processes for compliance assurance. These elements are part of the demands for greater accountability.

Therefore, the challenge for management in pursuing the e-government agenda is not simply to put the various elements of corporate governance in place but to ensure that those elements are effectively integrated; are well understood; and applied effectively throughout co-operating/collaborating organisations.

**Risk Management and Accountability**

Corporate governance is concerned with achieving results while taking account of risk both as an opportunity and as something to be avoided or minimised.

Government agencies are expected to deliver results to the standards expected, consistent with government policy. Thus, risk management should play an important role in agency governance to achieve this outcome. It will become even more important in a networked or joined-up environment given the likely more complex and multi-faceted management task.

Risk management in the APS was given a high profile in 1996 through the publication of the Management Advisory Board and its Management Improvement Advisory Committee of Guidelines for Managing Risk in the APS. The ANAO, through its work, has continued to emphasise the importance of risk management in maximising...
program effectiveness and providing greater transparency in decision-making processes.

Formal risk management may have been seen to be discretionary in the past but it is now an essential element of sound corporate governance and management practice. The goal is to embed a culture of risk management in organisations so that consideration of risks and risk mitigation strategies becomes second nature to managers at all levels. This is particularly important as the nature and significance of risks change in the public sector as the role of the public sector itself changes. The lack of suitable risk management practices generally features in examples of poor administration that are highlighted from time to time in performance audit reports.

It has been a very positive development in recent times to see the number of agencies that have involved their executive board and senior management in setting risk management strategies at the organisational level and then required each program area or organisational unit to, in turn, prepare operational risk management plans. In establishing a governance framework for e-government projects that involve multiple players, a critical early step in any planning process will be the conduct of comprehensive risk identification and assessment in relation to each project.

In the emerging world of e-government, where the Internet and electronic transactions are the norm rather than the exception, the essential issues remain the same. The need for accountability has not changed. Auditibility is still an issue. How these concepts are handled in this new environment will depend on the willingness of agencies to continue to focus on the main tasks; approach them strategically within robust governance frameworks; and use sound risk management methodologies. Those who perform well will continue to recognise, in the electronic environment, the tools necessary to deliver improved services to those who depend on them.

A recent comparative study completed by Accenture on e-government concluded that Australia generally measures up well worldwide but the environment is changing so quickly that it is difficult to be conclusive as to our on-going position. One important message is that we will have to deliver on the initiatives being undertaken. That is an important element of our accountability to the Government and to the Australian Parliament. However, the achievement of e-government objectives presents particular challenges to public sector managers and to the issues of accountability:

*Calls for government service delivery to migrate from in-line to online sooner rather than later often overlook the complex social, regulatory and legal issues governments face in changing their service delivery models.*

The connectivity and interdependence made possible through information and communications technology also creates vulnerabilities. The proliferation of computer viruses and hackers seeking to manipulate critical computer systems poses serious risks to government agencies. Such threats are only likely to grow in the future. These concerns also raise questions about adequate business continuity arrangements which also have important accountability implications for agency management in relation to their stakeholders.
Such risks involved also raise issues associated with the privacy and confidentiality of personal information. These issues have considerably excited Parliamentary interest in recent months. Unless appropriately controlled, computerised operations can offer numerous opportunities for committing fraud, unauthorised tampering with data, or disrupting vital operations. The Commonwealth Protective Security Manual\(^{30}\) has also focused greater attention on electronic security issues as well as on related agency obligations. As with many other aspects of the move to e-government, it is often a lack of awareness from the top down that creates a major barrier to implementing appropriate security measures as part of sound risk management.

As dependence on information technology grows and new high risk areas emerge, public sector agencies need to adopt, or adapt, observed better practices to correct underlying management problems that impede effective system development and operations. Effectively managing these risks will, in many cases, have a major impact on achieving business objectives. Robust corporate governance processes that are pervasive throughout an organisation will both help to identify and deal with such problems, as I observed earlier and reiterate.

As a practical example of this, the Victorian Department of Natural Resources and Environment decided that one of its first tasks in reforming its procurement processes to introduce a fully electronic procurement system was to:

*Rewrite its purchasing policies to more closely link purchasing with business plans and outputs and to de-emphasise price as the overriding consideration and emphasise value for money and accountability*\(^{31}\).

Another key element of the Department’s reform process was to re-align the delegation authorities of staff with their level of responsibility.

The delivery of services via the Internet introduces new risks and exposures that can also result in a legal liability for government. Well-designed security and privacy policies can minimise such risks and liabilities, while informing agencies’ clients of important aspects of the services they can expect to receive. Nevertheless, such policies need to be kept under close scrutiny particularly with the development of single portals that integrate the complete range of government services and provide links to these based on function. Of course, government has to be committed to making the portal its preferred way of interacting with citizens, as discussed earlier. Otherwise, the risk is that people will not use such a facility.

Transacting business in the electronic environment, whether acting as an individual agency or in partnership with the private sector or other government agencies, also raises the issue of record-keeping, and particularly the provision and maintenance of electronic records.

**The growth of electronic records**

In the public sector at the moment, we have a three tiered hierarchy of different types of records. Hardcopy documentation (traditional paper file based records) is still at the top in many, if not most, agencies. That is followed by electronic or digitally

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\(^{30}\) Commonwealth Protective Security Manual

\(^{31}\) Rewrite its purchasing policies to more closely link purchasing with business plans and outputs and to de-emphasise price as the overriding consideration and emphasise value for money and accountability

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based information (using virtual office systems or groupware, electronic diaries or data and e-mail archives) and finally oral communications (which may or may not be supported by notes, diary entries, tape recordings or other evidentiary material). Nevertheless, there is an increasingly rapid move towards using electronic, rather than paper, records. The United Kingdom Public Records Office has listed a number of changes taking place in government with the use of information and communications technology which are focussing attention on records management responsibilities in the electronic business era.32

The principal changes taking place are as follows:

- the recognition that records in electronic form are a valuable corporate information resource and an important means of meeting accountability requirements;
- the drive to deliver co-ordinated government services, to provide access to government information, and to develop electronic service delivery to the citizen through the use of information and communications technology;
- the pressure to reduce costs through the redesign of work processes, the maintenance of only those records that are required to be kept, the reduction of paper, the automation of manual records classification and filing operations and the reduction in the number of staff responsible for such operations;
- the need to innovate, and to manage information and knowledge assets more effectively in support of innovation; and
- the development of document and record management software applications within a networked environment, providing facilities for creating, storing and retrieving electronic documents, and mechanisms to safeguard corporate information.

The Office goes on to observe that:

*The fundamental requirements of electronic transactions are no different in their basic nature from their paper counterparts: they need to be recorded, captured in a fixed form, maintained and made accessible as records.*33

There is also an increasing tendency for policy and administrative decisions to be communicated and confirmed through e-mail. This is a function of our changing expectations about the speed of communications, a growing emphasis on timely management of the ‘political’ dimensions of policy, and the appropriation by the public sector of a ‘commercial paradigm’ in which ‘deals are done’. This is given added impetus by outsourcing and the involvement of private sector partners in various aspects of government’s operations.

The growth of electronic records becomes increasingly important in light of the Government’s plan to establish the public sector as a leading-edge user of IT, and its commitment to all appropriate services being Internet-deliverable by end 2001. The use of IT-based records creates a number of issues, including such fundamental matters as those of appropriate definition of such records. Not least of the problems is
the legal validity of electronic transactions which is receiving increasing, if not gradual, consideration. The other major consideration is to ‘authenticate’ the parties to transactions. This raises issues of electronic signatures and tying them to those responsible. The Electronic Transactions Act 1999 provides some guidance on these matters. The Act is based on two principles – functional equivalence (also known as media neutrality) and technology neutrality.

The term functional equivalence means that transactions conducted using paper documents and transactions conducted using electronic communications should be treated equally by the law and not given an advantage or disadvantage against each other. Technology neutrality means that the law should not discriminate between different forms of technology, for example, by specifying technical requirements for the use of electronic communications that are based upon an understanding of the operation of a particular form of electronic communication technology.

The Electronic Transactions Act 1999 (ETA) was introduced to provide a regulatory framework that recognised the importance of the information economy to the future economic and social prosperity of Australia; facilitate the use of electronic transactions; and enable business and the community to use electronic communications in their dealings with government.

Among other things, the ETA ensures that requirements imposed under a law of the Commonwealth can be met in electronic form, for example, a requirement to give information in writing, to provide a signature, to produce a document, to record information, and to retain a document.

These days it is clear that all digital data - such as that which constitutes e-mail messages, database systems, websites and other information systems - created or received in the conduct of Commonwealth business are Commonwealth records and need to be managed in accordance with the Archives Act (Commonwealth) 1983.

Several practical record-keeping issues associated with the developing IT environments have been identified by the ANAO. Some audits have found scope in particular agencies for increasing the use of technology to save time documenting activities and collecting results, and to reduce the error rate. Over the past three or so years, financial statement audits have consistently identified problems with excessive or unauthorised access to IT systems, inadequate review and approval of access to these systems, and inadequate approval and testing of changes to applications.

The ANAO is currently undertaking an Assurance and Control Assessment (ACA) audit of record-keeping. The audit will assess record-keeping policies, systems, and processes in terms of good business practice, requirements under the Archives Act, relevant Government policies, and professional record-keeping principles. For example, the Australian Standard on Records Management (AS4390:1996) is largely being adopted as the international model in a new International Standards Organisation Records Management Standard (ISO 15489).
Following the Australian Law Reform Commission’s 1998 report on the Archives Act, the National Archives has been increasingly pro-active in the promulgation of guidance to Commonwealth bodies on record-keeping practices. Commonwealth record-keeping guidance culminated with release in March 2000 of an extensive range of record-keeping standards, policies, tools and guidelines for the Commonwealth on the National Archives web-site under its e-permanence logo. The e-permanence guidelines form the basis for a coherent framework for Commonwealth record-keeping. Some of the guidelines are formal requirements, for example, where they are linked to Government record-keeping requirements for web-based activity under the Government On-Line strategy.

Records are an indispensable element of transparency, and thus of accountability, both within an organisation and externally. Records are consulted as proof of activity by senior managers, auditors, members of the public or by anyone inquiring into a decision, a process or the performance of an organisation or an individual. As we move towards and era of e-government, ensuring the creation and maintenance of appropriate electronic records will be equally important as ensuring appropriate security and privacy in electronic transactions between governments, citizens and the business community.

While the range of accountability issues associated with the introduction of e-government can be daunting, management’s focus has to be on its overall accountability for delivering identified organisational outputs and outcomes efficiently, effectively and ethically. With multiple agencies sharing responsibility for delivering e-government outcomes, new governance and accountability frameworks will be called for. The following observation points to likely consequences:

One stop, non-stop e-government portals will revolutionise not just the way public services are delivered, but government itself as well.

IV DEVELOPING PARTNERSHIP ARRANGEMENTS

It is apparent that at least part of the solution for delivering e-government will involve partnerships with some other public and/or private sector organisations. The Prime Minister of Australia recently observed that a particular challenge for the public service:

is the capacity of departments to successfully interact with each other in pursuit of whole of government goals and more broadly, for the entire Service to work in partnership with other bureaucracies, with business and with community groups as resources and responsibility are devolved closer to where problems or opportunities exist.

The Prime Minister also indicated that:

Whole of government approaches, collectively owned by several Ministers, will increasingly become a common response.

E-government can only be effectively realised if there is confidence that agencies are able to provide the necessary platform, in terms of governance, capability and
capacity. In terms of delivery, information technology is the enabler which will allow the citizen to be served by whole-of-government approaches, rather than simply by a particular department or agency.

While in terms of governance, there should be an agreed understanding about the contribution each agency can make to the achievement of new program objectives, there will also need to be a collective responsibility to achieve the objectives under governance arrangements appropriate for the task. Australia is fortunate that, historically, this collective approach reflects the culture of the APS.

It is interesting to note in the United Kingdom that:

An early outcome of the modernization agenda has been a partial retreat from the belief in competitive markets as a solution to the problems of public service provision. Greater attention is now being given to ‘joining up’ those public services that became increasingly fragmented under the previous regime.

...There have also been various policy pronouncements regarding the need for greater collaboration between purchasers and providers, and for more strategic inter-agency approaches towards the development of public services

This approach has been termed the ‘third way’ in the UK, which could be described as a mixed economy of the best features of market and bureaucratic designs.

Government bureaucracies simply do not have the information-processing capacity of markets – they are unable to solve the coordination problem nor can they successfully mimic the incentives established in markets. Markets, however, are also deficient in important and significant respects. They are not efficient except under very restrictive and special conditions. Moreover, they produce welfare distributions that are not socially just.

There is, therefore, the need to find a balance; a ‘third way’.

**Public - Private Sector Partnerships**

Networking can be expected to evolve to include strategic arrangements and structures between public organisations, private operators and voluntary associations as well as individual clients and the community generally. Such interaction should, in turn, generate new forms of service delivery and probably, therefore, redefine the various relationships between government and the community, over time. They may also erode some of the apparent differences between the public and private sectors.

With organisational boundaries becoming less important in terms of program delivery, governance arrangements will have to evolve to compensate for any current limitations. The governance factors that are important at an individual agency level are important in any partnership arrangement, particularly those concerning responsibility and accountability.
With the trend towards greater outsourcing of particular IT related functions or services, and the pursuit of administrative efficiencies by agencies, contract management is becoming a more critical element of agency operation. In the 1999-2000 financial year, some 129,000 Commonwealth contracts totalling $9.9 billion were notified by gazettal.

A large amount of information and better practice guidance has been issued on the topic of contracting, predominantly focussed on the front-end of the contract process, that is, those stages leading to contract signature. 42 43 44 45 46

The ANAO has reviewed a wide range of tender selection and contract management activities by agencies. While there are exceptions, audits undertaken in recent years suggest that agencies generally undertake the selection processes quite well. Nevertheless, public sector managers should be cognisant of the potential risks which might arise from contractual arrangements with private sector interests, such as:

- short term flexibility may be compromised by unforeseen ‘downstream’ costs or liabilities which erode or offset early gains;
- there may be a tendency for government to bear a disproportionate share of the risks, such as through the offer of guarantees or indemnities;
- the failure of private sector service providers may jeopardise the delivery of the project, with the result that the government may need to assume the costs of completion plus the costs of any legal action for any contractual breaches;
- inadequacies in the modelling and projection of costs, risks and returns may, under some conditions, result in an obligation by governments to compensate private sector providers for actual losses or failure to achieve expected earnings;
- there may be some loss of transparency and accountability for disclosure as a result of a private sector provider claiming commercial confidentiality with respect to the terms of their investment; and
- the level of private sector investment and the amount of risk private sector providers are willing to bear may be inversely proportionate to the conditions placed on them by governments to determine pricing, to manage delivery of community service obligations, or to transfer or sell an interest in the project.

When it comes to risk, the overarching principle is that risk should be allocated to the party best able to manage and control that risk. 47

A key point for agencies to appreciate, when entering into joint projects with private sector organisations, is that the nature of the relationship changes once delivery of a function moves from the public to the private sector. ANAO has recently issued a Better Practice Guide on contract management which is intended to assist agencies in managing contractual relationships 48. As the Guide indicates, private sector service providers are in business to make money and to increase their shareholder value. Commonwealth organisations, the recipients of these services, enter into the contracts primarily seeking the best value for money. These views are different but are not mutually exclusive. They can create significant risks and opportunities. Some of
these risks can be managed through establishment of an effective operational framework during the contract negotiations, which goes some way to enabling effective management of the contract over its life.

If parties enter into a contract with a good understanding of the other’s objectives, needs, goals and risks, it is possible that a best-fit solution will be found for the service delivery. As well, opportunities can be maximised for all concerned. The OECD has indicated that:

\[
A \text{ good contract is one that strikes, at a level which will be robust over time, a balance between specification and trust which is appropriate to the risks of non-performance but does not either impose unnecessary transaction costs or inhibit the capacity or motivation of the agency to contribute anonymously and creatively to the enterprise in question.}^{49}
\]

The ANAO Better Practice Guide contains research and experiences of better practices in contract management in Australia and internationally.

Contract administration relationships are generally categorised as either traditional or non-traditional:

- the traditional relationship is formal, with an approach based on control by the customer and compliance by the vendor; and
- non-traditional relationships are categorised as flexible and cooperative arrangements in which the customer and supplier share common goals.

The four common relationship types form a continuum as shown in the following figure:

\[\text{Figure 2 - The contract relationship continuum}\]

The relationship types can be described as follows:

- **traditional** relationships—legalistic frameworks create a strong compliance/control relationship relying on extensive checking and verifying of the contract against the service delivery and a tendency towards an 'adversarial' culture. This
relationship centres on the obligations set out in the contract and tends to be at arm’s length with each party seeking maximum advantage;

- **cooperative** relationships—involve both the purchaser and provider, to varying degrees, in cooperative management of the contract. This approach incorporates ideals such as developing trust, obtaining commitment and improving communication;

- **partnering** relationships—formalised processes underpinned by both a moral and legal agreement binding key stakeholders and other parties to act in the best interests of each other. The basis of partnering is ‘together we can solve problems and maximise opportunities’. Partnering relies on commitment by parties beyond the terms of the contract. It also involves parties outside the contract—key stakeholders can be involved in relevant aspects of overall contract management; and

- **alliance** relationships—take the key elements of partnering to the next step by having a risk/reward sharing philosophy as well as a transparent or open-book approach towards all financial matters, including cost and profit. Alliance agreements can be more effective than other arrangements for providing services that are difficult to define, are critical to an organisation’s performance and require innovative solutions from the provider and creative management by the purchaser. They are also beneficial for long-term, strategic contracts as each party relies absolutely on the performance of the other.

It is, perhaps, the more non-traditional types of relationship that will be prominent in the world of e-government. Having noted the need for shared goals, shared responsibilities and perhaps even accountability, in mechanisms designed to deliver e-government solutions, it may be that the more traditional, contractual arrangements will prove too inflexible for the management task.

The ANAO tabled an audit\(^50\) last year on the new method of project alliancing which requires appropriate incentives to encourage ‘best for project’ behaviour from the agency and the commercial alliance partners to achieve the cost, time and quality requirements of the project. Under the risk/reward regime of the alliance agreement, the agency and the commercial alliance partners would share any cost savings against budget in the proportion of 70:30 respectively. At the time of the audit, the agency and the commercial alliance partners were to contribute to any cost overruns against budget in the proportion of 30:70 respectively.

More networked or partnered arrangements can also overcome some of the inflexibilities of a contract. Partnering and strategic alliancing are increasingly being adopted in the private sector as a means of coordinating economic activity. Such networked arrangements are seen to enable a greater exchange of ideas and information and allow partners to gain access to knowledge and resources of the other parties. The Victorian Public Accounts and Estimates Committee observed that a partnering approach could be warranted where:

- **service providers are encouraged to be innovative in the delivery of services;**
• the nature of the services is highly variable or evolving, leading to poor predictability of demand and service content; and

• the services will be using leading edge practices/technology in which a high degree of flexibility on the part of both parties will be required to make it work.51

Another important aspect of developing networked solutions is the availability of information to clients. Information technology is providing significant opportunities for government to ensure that existing and potential clients have access to the information they require. Information technology can also be an effective tool for improving the cost-effectiveness and quality of services provided to citizens. It is also central to improving accountability. It is not an exaggeration to suggest that the effective networking of information technology systems will be crucial to implementing integrated public services and their responsive delivery in a seamless manner to citizens. This is also a central consideration for the knowledge management function, particularly in the contracting out of IT support services as well as telecommunications–based public inquiry services.52

Australia’s Commonwealth Government Service Delivery Agency, Centrelink, recently announced that it would pursue strategic partnerships with a range of IT suppliers, rather than outsource its entire IT infrastructure to one supplier. Centrelink believes that its new sourcing framework will provide a more open and flexible solution to IT management within the organisation, describing the new approach as ‘dynamic and granular’ as opposed to ‘procedural and one-off’.53 To date, Centrelink has issued tenders for its desktop environment, IT storage and web management functions. It remains to be seen how well the individual elements of Centrelink’s online service delivery functions are integrated.

A new class of private sector organisations is emerging in the US – application service providers (ASPs), offering services ranging from transaction processing to full portal hosting and management. Companies such as ezgov.com, Govhost.com and govWorks.com permit citizens to pay taxes, parking tickets and perform other monetary based transactions using the companies’ own technology and portals which link up with State or local government partners. The primary strength the ASPs bring to the portal marketplace is in supplying dedicated technical expertise to link web interfaces with financial institutions and government databases.

ASPs appear attractive to government departments unable or unwilling to resource a consistent 24 x 7 operation. If governments choose to manage portals themselves they can retain immediate control and accountability. If they engage ASPs they can shed costs along with a certain measure of control, while giving their clients access to superior technical capabilities.54 Accountability issues come into clear focus when the private sector is engaged to deliver government services to citizens, as I have already noted.

Privacy considerations

Several online surveys have indicated that privacy is a major concern for Internet users. These surveys indicate several concerns including a lack of transparency regarding the use and disclosure of personal information on websites, the tracking of
individual’s activities at websites and concern about the security of their information in the Internet environment.\textsuperscript{55}

To fully address such concerns, a Better Practice Guide, recently prepared by the ANAO,\textsuperscript{56} suggests that agency Internet websites should incorporate a prominently displayed Privacy Statement that states what information is collected, for what purpose, and how this information is used, if it is disclosed and to whom. It should also address any other privacy issues.\textsuperscript{57} According to Privacy Compliance Audits conducted by the Privacy Commissioner, of Commonwealth Government websites in 2000 and 2001, about 20 per cent of larger agencies, and 38 per cent of smaller agencies, still need to include a privacy statement on their web sites.\textsuperscript{58}

The risks involved in broadening networks and Internet use also raise issues associated with who has access to the records. This has consequences for the privacy and confidentiality of records, which are of considerable concern to Parliament. This is particularly the case during outsourcing, where private sector service providers have access to collections of personal records that could be used for inappropriate purposes, such as sales to other private sector organisations of personal details for mailing lists.

All Commonwealth agencies are subject to the \textit{Privacy Act 1998}, which contains a number of Information Privacy Principles (IPPs) that provide for the security and storage of personal information. The Privacy Act defines personal information as:

\begin{quote}
information or an opinion (including information or an opinion forming part of a database), whether true or not, and whether recorded in a material form or not, about an individual whose identity is apparent, or can reasonably be ascertained, from the information or opinion.\textsuperscript{59}
\end{quote}

The IPPs state that if a record is to be given to a service provider, the record keeper (ie the agency) must do everything reasonably within its power to prevent unauthorised use or disclosure of information contained in the record.

The increase involvement of the private sector in the provision of public services raises issues about the security of agency data and records, particularly in electronic form. In the past, the obligations that apply to Commonwealth agencies under the Privacy Act have not applied to private sector organisations. However, the Privacy Amendment (Private Sector) Act 2000 passed in December 2000 aims to provide privacy protection for personal records across the private sector, including those organisations providing outsourced services to the public sector. The Act enables a contract between a Commonwealth agency and the private sector supplier to be the primary source of the contractors’ privacy obligations regarding personal records. The contractual clauses must be consistent with the IPPs that apply to the agency itself, and details of these privacy clauses must be released on request. The Act:

\begin{quote}
aims to control the way information is used and stored, and bring to justice those who abuse private information for their own ends. Placed in the insecure context of e-commerce and e-mail transmission of personal details, issues of privacy have become more significant.\textsuperscript{60}
\end{quote}
For many organisations, including health services, the new private sector provisions commenced on 21 December 2001. For small businesses to which the provisions will apply (except health services), the new provisions will commence one year later. The Act will apply to ‘organisations’ in the private sector. An organisation can be an individual, a body corporate, a partnership, an unincorporated association or a trust. It will cover:

- businesses, including not-for-profit organisations such as charitable organisations, sports clubs and unions, with a turnover of more than $3 million;
- federal government contractors;
- health service providers that hold health information (even if their turnover is less than $3 million);
- organisations that carry on a business that collects or discloses personal information for a benefit, service or advantage (even if their turnover is less than $3 million);
- small businesses with a turnover of less than $3 million that choose to opt-in;
- incorporated State Government business enterprises; and
- any organisation that regulations say are covered.61

A key provision of the Act is the inclusion of ten ‘National Privacy Principles for the Fair Handling of Personal Information’. These Principles set standards about how business should collect, secure, store, use and disclose personal information. The Act makes a distinction between ‘personal’ and ‘sensitive’ information.62 The latter includes information on a person’s religious and political beliefs and health, where the private sector is more strictly limited in its collection and handling. The legislation is likely to have a marked impact on the private sector’s involvement in the delivery of public services.

Agencies must also consider the privacy of personal records that are provided to other public sector entities for purposes such as data matching. There are quite valid privacy protection reservations about the use of data matching, but there is no doubt that it has facilitated better decision-making as well as saving the taxpayer many hundreds of millions of dollars.

Although probably not within a strict Privacy Act definition, the use of clickstream data and cookies have implications for privacy. Clickstream data results from collecting information on user access to Internet sites, such as server address, top level domain name, pages accessed and so on. Cookies can be used to track an individual’s activities on a web site and store personal information for future use, for example, when the same user returns to the website that issued the cookie. Many users consider cookies, in particular, intrusive. For practical purposes they should be treated in the same way as other privacy related material.

Maintaining accountability in a partnering environment

It is essential that agencies have the appropriate kind and level of skills to effectively manage contracts and/or partnerships because the agency is still considered to be
accountable for the delivery of public services. Agencies must have the knowledge and understanding of the activity or business element that has been contracted out and have a clear appreciation as to whether the business objectives are being met. Where core functions are concerned, agencies cannot afford to contract out their managerial competence in these areas.

Agencies remain accountable for the delivery of public services. A recent Joint Committee on Public Accounts and Audit Report indicates that:

> Under the existing accountability framework, contracting out of government services can lead to less accountability. From a performance and outcome perspective, the Industry Commission, for example, suggests contracting out leads to enhanced accountability through the need to more carefully specify performance and outcomes. But this only holds if the contractual information is public.  

It is critical that agencies consider the information they require to effectively manage outsourced arrangements, inform decisions on the achievement of program objectives and meet internal and external accountability obligations. In this context, information to meet external accountability obligations should not be seen as an additional impost but a derivative of information required for sound program management.

In other words, there is a cost to accountability. Less direct relationships, through the introduction of a new player in the accountability chain—the private sector service provider—and greater decision-making flexibility, strengthen the need to demonstrate an adequate accountability framework. There have been a significant number of reviews in Australian jurisdictions concerning accountability issues relating to government contracting. While a number of concerns have been expressed, there has not been any attempt to re-define ongoing accountability expectations, including any notion of shared accountability.

Virtually all traditional accountability mechanisms rely on the availability of reliable and timely information. As a result of contracting out to the private sector, the flow of information available to assess performance and satisfy accountability requirements has, on the whole, been reduced. This situation has arisen where performance data is held exclusively by the private sector or through claims of commercial confidentiality that seek to limit or exclude data in agency hands from wider parliamentary scrutiny. Thus accountability can be impaired where outsourcing reduces openness and transparency in public administration. For this reason, the issue of commercial confidentiality is likely to be of increasing importance as the extent and scope of outsourcing grows.

A particular concern has been the insertion of confidentiality clauses in agreements/contracts which can impact adversely on Parliament’s ‘right to know’ even if they do not limit a legislatively protected capacity of an Auditor-General to report to Parliament. In making recommendations to the Federal Senate Finance and Public Administration References Committee in our 1997 Inquiry into Contracting Out of Government Services, ANAO suggested, as did the Commonwealth Ombudsman, that in relation to commercial confidentiality claims by private sector contractors a reverse onus of proof test should be applied, as follows:
‘In our view, the question of whether or not commercial-in-confidence information should be disclosed to the Parliament should start from the general principle that the information should be made public unless there is a good reason for it not to be. In other words, what we are saying is there should be a reversal of the principle of onus of proof which would require that the party arguing for non-disclosure should substantiate that disclosure would be harmful to its commercial interests and to the public interest. 64

The issue rapidly became a matter of practical importance and some urgency. A particular concern was that agencies may too readily agree to treat contractors’ documents as confidential, notwithstanding the wide access powers that may be provided to the Auditor-General.

The ANAO recently undertook a performance audit of the use of confidential provisions in the context of commercial contracts, in response to a request of the Senate Finance and Public Administration References Committee. The audit concluded, among other things, that:

• there is a lack of consolidated government-wide guidance available to agencies on the use of confidentiality provisions in contracts;
• there are weaknesses in how agencies generally deal with the inclusion of confidentiality provisions in contracts, including consideration of what information should be confidential and uncertainty among officers working with contracts over what information should properly be classified as confidential; and
• agencies should seek to include provisions in contracts which allow information to be disclosed to parliamentary committees.

The audit report made three recommendations that were generally agreed by the agencies concerned. As well, the ANAO developed some criteria for agencies in determining whether contractual provisions should be treated as confidential. 66 These criteria are designed to assist agencies to make a decision on the inherent quality of the information before the information is accepted or handed over – rather than focusing on the circumstances surrounding the provision of the information. The report also gave examples of what would not be considered confidential 67 and examples of what would be considered confidential. 68

The Senate Finance and Public Administration References Committee in a recent report on Commonwealth contracts supported the set of criteria developed by the ANAO for determining whether a sound basis exists for deeming information in contracts confidential. As well, the Committee recommended changes to the Senate Order of June 2001 which increased the openness and accountability of all Commonwealth contracts with a value of $100,000 or more aimed at strengthening and clarifying the order. 70

The recent and continuing adoption, or adaptation, of private sector approaches, methods and techniques in public service delivery has highlighted issues involving gains and losses between the nature and level of accountability on the one hand and
private sector cost efficiency on the other. On this issue, it has been noted by Professor Richard Mulgan of the Australian National University (ANU), who has contributed significantly to the debate over public sector accountability within a climate of significant reform, that:

Contracting out inevitably involves some reduction in accountability through the removal of direct departmental and Ministerial control over the day-to-day actions of contractors and their staff. Indeed, the removal of such control is essential to the rationale for contracting out because the main increases in efficiency come from the greater freedom allowed to contracting providers. Accountability is also likely to be reduced through the reduced availability of citizen redress... At the same time, accountability may on occasion be increased through improved departmental and Ministerial control following from greater clarification of objectives and specification of standards. Providers may also become more responsive to public needs through the forces of market competition. Potential losses (and gains) in accountability need to be balanced against potential efficiency gains in each case.71

Optimising the trade-off between accountability and a lower market-oriented price requires senior public service managers to ensure they are not risking the efficiency and effectiveness of their core functions by ill considered, ad hoc, outsourcing, the effects of which may not be confined to the particular services or activities being outsourced.

Where the decision is made to outsource, value for money should be the primary factor which agencies should be considering.72 This requires a range of factors to be taken into account—not only costs.

To maximise overall value for money, it is important that the above assessment take place in the context of the total business of the organisation in order to manage the risk that, by considering outsourcing individual activities in isolation, counter-productive and costly outcomes may result from outsourcing in the medium to longer term. In this respect, attention should also be given to the effect of outsourcing on related activities which may be delivered through another public sector agency. That is, it might sometimes be necessary to examine an outsourcing decision from an across-agency perspective to get the best public sector outcome.

V CONCLUDING REMARKS

Sound corporate governance frameworks will enhance the development of suitable networks and partnerships and facilitate risk management so that opportunities can be taken to be more responsive and improve performance while minimising risk. Fundamentally, good governance arrangements increase participation; strengthen accountability mechanisms; and open channels of communication within, and across, organisations. In this way, the public sector can be more confident about delivering defined outcomes and being accountable for the way in which results are achieved.
These requirements are integral to the more market-oriented approach being taken to public administration in recent years. The disciplines involved have focussed greater attention on performance management and accountability for that performance whether the activity is performed by public or private sector organisations. Public sector organisations have to recognise performance obligations to stakeholders and the negative aspects of being risk averse. We also have to be aware of the need for leadership and control and the confidence and assurance that the latter engenders for all stakeholders and for the reputation of the organisation involved, particularly in any partnership arrangement with the private sector.

New technology should facilitate the sharing of information within whatever constraints of privacy and security and/or need to know that might apply. As well, technology can assist in the delivery systems reflecting ‘seamless’ government and greater responsiveness to citizens. Some writers have radically extended the possibilities of information technologies toward a vision of the automated state in which government would establish and manage contracts for project or service delivery largely through information technology. The suggestion is that the imperatives of technology are creating the conditions for the state to become ‘virtual government’.

It is unlikely that such ‘sharing’ could be definitively covered in present day ‘legally based’ contracts. Other forms of agreement and disciplines are emerging to ensure that both the parts and the whole are held responsible for their overall performance; and that accountability for the results is absolutely clear both to the immediate parties and to other stakeholders. Nevertheless, we are witnessing insertion of clauses in contracts requiring private sector contractors and sub-contractors to adhere to a number of the requirements imposed on public servants, such as adherence to values and ethical conduct set out in the Public Service Act 1999 and provisions of the Financial Management and Accountability Act 1997.

The pressures are only likely to increase, even in so-called ‘core’ areas of government, for more ‘cross-cutting’ approaches to better deliver program outcomes, with commensurate accountability for achievement of required results.

Managers are showing interest in exploring the notion of ‘relational contracts’ in particular environments to test their effectiveness both in terms of performance and accountability. These so-called ‘soft’ contracts focus on cooperation as the guiding principle of contracts. It is perhaps another example of the exercise of management flexibility to achieve required outcomes where real partnerships and full cooperation of a range of service suppliers are required to be citizen ‘centric’. On the other hand, is an inability to adequately define performance and accountability requirements or, indeed, lack of private sector acceptance particularly of the latter, sufficient reasons to reject contracting-out? In some areas of government the answer will be clear cut. However, in others, the answer may well depend on what guidance is provided by the Government and the Parliament.

We should be able to explore different partnership arrangements within the public sector to ascertain what will work in a cohesive and sensible fashion in particular situations. Moreover, it may also be possible to test arrangements within the private sector, where it is involved in the provision of public services, in a way that can
accommodate both private and public interests. The future challenge to partnering in the public sector may be to go beyond strategic partnerships with particular contractors and to develop in association with other agencies, community and private sector organisations, public sector ecosystems as described in the private sector.

Strategic combinations of public interest and private profit could generate new forms of service delivery and redefine the relationship between governments and the community. However, in my view, whatever is attempted needs the support and endorsement of the Government and Parliament if it is to succeed.

The on-going challenge for the public sector auditor will continue to be meeting performance and accountability expectations, whatever the approach taken to our changing environment. This will increasingly involve establishing agreed modes of network governance to ensure proper integration and coordination of networking activities essential to the effective operation of strategic alliances. Such governance arrangements have to be well understood and accepted by all concerned. Arrangements have to be dynamic and flexible to meet the needs of all participants including, importantly, those of citizens. Undoubtedly, changes in culture in both the public sector and in the general community are also necessary for the successful implementation of e-government.

Moreover, with the greater involvement of the private sector, particularly in service delivery as part of an outsourcing situation, there is the added complication of generating common understandings, cultures, values and notions of accountability and responsibility. As part of this broader responsibility, auditors will also need to be prepared, and equipped, to engage in real time auditing as electronic technology, particularly in the communication area, comes into more widespread use across the public sector. In this way, there will be more scope for preventative action and a learning process for all stakeholders in order to ensure that proper accountability and required performance and results are achieved by both individual agencies and private sector firms, particularly in any ‘shared’ arrangement or partnership as part of joined-up government.
### Appendix 1 – Electronic Service Delivery Targets

The table below provides a summary of ESD targets that have been established by selected countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>ESD Target</th>
<th>Status</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>All appropriate Federal Government services capable of being delivered electronically via the Internet by 2001</td>
<td>Unchanged</td>
<td>NOIE monitors progress every 6 months – 90% of agencies are on track to deliver all appropriate services online by the end of 2001.</td>
</tr>
<tr>
<td>Canada</td>
<td>All key government services fully on-line by 2004</td>
<td>Unchanged</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>To enable 80% of the administrative services of municipal government agencies to be delivered via the Internet by 2005</td>
<td>Recently established</td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>A significant proportion of forms &amp; requests can be dealt with electronically by 2001</td>
<td>Unchanged</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>All administrations to provide public access to government services and documents by the end of 2000</td>
<td>Achieved through the Service- Public portal</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>All administrative targets that lend themselves to ESD to be made available by 2005</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>Hong Kong</td>
<td>90% of those services amenable to ESD to be enabled by the end of 2003</td>
<td>Recently established</td>
<td>Recent survey carried out – 65% of those services amenable to ESD are on-line</td>
</tr>
<tr>
<td>Ireland</td>
<td>All but most complex of integrated services by end of 2001</td>
<td>Unchanged</td>
<td>Reported on annually</td>
</tr>
<tr>
<td>Italy</td>
<td>Services to business portal by 2001 Services to citizens portal by 2002 (Main services)</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>To achieve e-government by fiscal year 2003</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>The Netherlands</td>
<td>At least 25% of public services at both central and local level to be delivered electronically by 2002</td>
<td>Re-Formulated</td>
<td>ICT benchmark in Dec 2000 revealed that 18% of services to citizens are carried out electronically and 19% of services to business. Progress at central and local government level is continually assessed through the Internet monitor.</td>
</tr>
<tr>
<td>Spain</td>
<td>No high level target</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>No high level target</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>100% of government services carried out electronically by 2005</td>
<td>Unchanged</td>
<td>Oe-E quantitative six-monthly progress report – as of Autumn 2000, 42% of services were on-line and 73% are expected at the end of 2002.</td>
</tr>
<tr>
<td>USA</td>
<td>Provide public access to government services and documents by 2003. Provide public with an option to submit forms electronically</td>
<td>Unchanged</td>
<td></td>
</tr>
</tbody>
</table>

To deliver on its promise that people should not need to understand government in order to interact with it, Cabinet agreed in November 2000 to put in place an online customer focussed portals framework.

In layman’s terms, a portal is simply a directory of services offered by government. In effect it is the “Yellow Pages” of government delivered electronically. The new portals framework consists of a generic entry point - australia.gov.au – and a set of 18 portals covering all areas of government.

The main focus and benefit of the australia.gov.au portal is that customers, without any prior knowledge of government will be able to easily and confidently select a portal option that will assist them in finding the government services they require.

The major benefits of australia.gov.au are:

- making government online more user friendly;
- simplifying access to a comprehensive range of information and services online from all government agencies;
- ensuring Australia keeps pace internationally, particularly with countries such as the UK and Canada;
- assisting government online to help drive the uptake of e-transactions and the Internet more broadly in the economy; and
- setting the framework for cross agency linked transactions.

The Portals Framework

Of the 18 portals being developed, the first nine are already available with the second wave due to be online by mid 2002. The portals are arranged into customer and subject topics with links to all areas of the Commonwealth Government and with further links to state and local governments. The portals will be available through their own Internet address such as youth.gov.au, allowing customers to be intuitive when searching for online government information and services. It will be possible to discover the same services through a number of portals. Information about tax, for example, can be found under the ‘families’, ‘youth’ and ‘business’ portals.

Customers will be able to choose the way they interact with government. They may prefer to go directly to a service they know well or have accessed previously or use australia.gov.au as the entry point.
**First 9 Portals**

<table>
<thead>
<tr>
<th>Customer Groups</th>
<th>Subject Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>Education</td>
</tr>
<tr>
<td>Regional Australia</td>
<td>Agriculture</td>
</tr>
<tr>
<td>Families</td>
<td>Science and Industry</td>
</tr>
<tr>
<td>Youth</td>
<td>Culture and Recreation</td>
</tr>
<tr>
<td></td>
<td>Workplace</td>
</tr>
</tbody>
</table>

**Second Wave Portals**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Indigenous</td>
<td>Environment</td>
</tr>
<tr>
<td>Women</td>
<td>Government</td>
</tr>
<tr>
<td>Community Groups</td>
<td>Law and Justice</td>
</tr>
<tr>
<td>Seniors</td>
<td>Health</td>
</tr>
<tr>
<td>Immigration</td>
<td></td>
</tr>
</tbody>
</table>

**Rolling out the portals framework**

The functionality of the portals and associated links will be continuously improved based on feedback from customer experiences and advances in technologies. The development of each portal is undertaken by a consortium composed of experts from agencies that have relevance to the portal or customer topic. Each consortium has a lead agency, which has direct portfolio responsibility for the subject area and the relevant portal.

Based on knowledge and research of their customers, the agencies have identified the online content to be found through the portals. This content will be tested over time and improved to meet customer needs.

Each portal will:

- be recognisable as part of the family of portals through consistent branding, which will also include the [australia.gov.au](http://australia.gov.au) entry point;
- provide a link back to the [australia.gov.au](http://australia.gov.au) entry point to access other portals and government information; and
- seek customer feedback to help shape how the portals are developed and improved in the future.

**Portals - The Future**

The [australia.gov.au](http://australia.gov.au) entry point is part of the continuous evolution of the portals framework which seeks to narrow the gap between customer needs and the solutions offered by new technologies.

The second wave of portals will be put in place over the next year with major sites and more topics to be added.

The portal development plan includes:

- making resources available from all tiers of government;
• improvement to available content, including a greater number of transactional services;
• further refinement of the presentation and integration of services; and
• personalisation and customisation features.

The TIGERS Project

The Australian Government's $10 million Trials of Innovative Government Electronic Regional Services program - known as TIGERS - is based in Tasmania. It is making it easier to transact online with Commonwealth, State and Local government at a single point.

TIGERS will enhance Service Tasmania’s already first class service delivery infrastructure to support the delivery of selected services from the three tiers of government.

Three modes of service delivery will be supported:

• Over the Internet
• Over the counter
• Over the telephone

An example of this was the recent announcement that applying to develop land is about to become faster and easier with the release of a Request for Tender online 'service pack'. Once developed the service pack will lead customers through all the steps to prepare and lodge their land development application.

It will contain legislation, information and services about Commonwealth heritage and environment requirements; State land titles information and, local council planning rules. Delays caused by customers lodging incomplete applications will be minimised as the service pack will take customers through the process, step by step. This is a good example of providing practical online applications to benefit the community. This was the fifth tender the TIGERS program has released for the integration of online government services, building on the current development of service packs for recreational fishing, housing, export services and starting school.

The TIGERS service packs will trial innovative ways of delivering cross-jurisdictional, integrated online government services to customers. They aim to demonstrate approaches and technologies that can be adopted by all tiers of government.
Appendix 3 – Selected Examples of Australian e-Government initiatives

A   NSW Department of Public Works and Services – Online Collaborative Procurement System


C   Commonwealth Business Entry Point (BEP) – selected website pages

D   South Australia Central - South Australia’s Government Portal

E   Service Tasmania – selected website pages

F   The TIGERS Project
In July 1998 the New South Wales Government released a White Paper called Construct New South Wales. The White Paper incorporates a discussion paper “Information technology in construction – make it happen” which nominates the Department of Public Works and Services (DPWS) as the lead agency in piloting IT initiatives.

The paper outlined a three tiered strategy for the introduction of information technology into the NSW Construction Industry.

- Adoption of electronic communications and commerce;
- Shared or common project information and communications;
- Virtual project, i.e. the use of comprehensive electronic project information and communicating at all levels of the project.

Asset.gov as an initiative is in line with and central to government policy on the introduction of information technology in the construction industry and for opening up opportunities for businesses in regional areas of NSW.

A collaborative platform like Asset.gov is a relatively new application of electronic commerce that is gaining rapid acceptance. Benefits to the community and government are substantial, both in potential for improvements in efficiency and in accessibility of information to government agencies, enterprises and a wide range of community groups.

The backbone of Asset.gov is an advanced document management system that supports the lodgment, storage and distribution of information with appropriate levels of security via the Internet. This allows all participants in a project to communicate and work together across different locations and time zones. It enables easy communication, understanding and involvement by the community, communication between client agencies, suppliers, contractors and design professionals at all stages from concept through all phases of the project.

At many points during the lifecycle of a construction project, stakeholders and project team members communicate and exchange information and documents. This is traditionally done using paper documents that are printed, copied, reviewed, e-mailed, delivered, couriered, posted, filed etc. Asset.gov provides a central repository for all project data and information generated during the project’s procurement phases. Project data only exists once, it is always current and the system manages access, security and version control based on the project teams predetermined workflow and communication protocols.

Asset.gov enables all project participants and stakeholders to access, share, collaborate, review, assess and authorised project information using Internet technology.
In particular, Asset.gov provides the following functionalities.
- Project team members are able to collaborate and communicate on the net regardless of location and time constraints;
- Information is in the one place, is only one version and is always current;
- Holding interactive pre Development Application sessions over the Internet;
- Lodgment electronic Development Application to council;
- Hosting ‘public exhibition’ of Development Application submission on behalf of the Council; over the Internet;
- Linking public feedback from Development Application website via e-mail connection back to the Council;
- Access to all tender documentation, site correspondence, meeting minutes, action logs, work schedules, defect schedules, variations etc are all on-line with audit trail and automatic notification;
- Providing interactive community feedback and information web sites using real time red-lining, dialogue box comment facilities;
- Ability to take measures and quantities of CAD drawings over the Internet.

In the area of contracting, the technology can provide the first ever integrated tools for practical collaboration between the design and construction professionals. While the industry culture has been slowly changing over the last few years, Asset.gov. technologies offer opportunities to extend the significant benefits to be realised from administrative functions into the area of design and construction optimisation.

Asset.gov. has the potential to significantly impact on internal processes of both suppliers to government and within government agencies.

**Benefits to users or asset.gov**

**Industry**

- Increased regional employment:
  - Through sub contractors, contractors and suppliers having access to the latest and complete project information (more accurate pricing – more job opportunities).
  - Ease of information access – (viewing tools of CAD drawings and specifications e.g.: ability to take quantities of plans-level structure etc.);
  - Ability for on-line design/documentation collaboration facility (eliminating barriers of distance and time);
  - Placing local consultants on equal terms for regional projects;

- Local knowledge and experience will be a competitive advantage;
- Improved efficiency during construction phase;
- Reduced cost due to error reduction, disputes and variations;
- Reduced construction period.
Clients

- Easy access to relevant and up to date information;
- Improved efficiencies in decision making
- Reduced cost due to efficiency gains
- Reduction in procurement period

Community

- Access to up to date progress on community facilities;
- On line involvement in decision making;

Whole of Government

- Savings across total Government capital works program;
- Database for total asset management planning for Government assets;
- Leading edge image for Government.
NOTES AND REFERENCES


6 In the 2000-2001 financial year, approximately 77 per cent of Australian individuals employed a registered tax agent to prepare their income tax returns.

7 Secure Sockets Layer encryption.


10 www.maxi.com.au developed by NEC Business Solutions Pty Ltd.

11 www.ukonline.gov.uk


15 Ibid.

16 operates around the clock - 24 hours a day, 7 days a week.


19 Ibid. para 3.6.


29 Ibid. p.6.


31 Young, Alan, 2001. Case Study: E-Commerce, CPA Australia, National Public Sector Convention Gold Coast. 27-30 March, p.4


33 Ibid, p.4.


35 Electronic Transactions Act (Commonwealth) 1999, Section 3 - Object.


38 Howard, J. The Hon, 2001. The Centenary of the APS Oration, Presentation to the Centenary Conference of the Institute of Public Administration Australia, Canberra, 19 June, p.5

39 Ibid. p.5


50 ANAO Report No. 34 1999-2000 Construction of the National Museum of Australia and Australian Institute of Aboriginal and Torres Strait Islander Studies, Canberra


57 Ibid, p.61.


59 Privacy Act 1988 (Commonwealth), Section 6.


62 Ibid. Personal information is information or an opinion that can identify a person. Sensitive information is information about an individual’s racial or ethnic origin, political opinions, membership of a political association, religious beliefs or affiliations, philosophical beliefs, membership of a professional or trade association, membership of a trade union, sexual preferences or practices, criminal record, or health information.

63 Joint Committee of Public Accounts and Audit 2000, Report 379, Contract Management in the Australian Public Service, Canberra, October, p.27


67 Ibid. p.64. The following types of information in, or in relation to, contracts would generally not be considered to be confidential:

- performance and financial guarantees;
- indemnities;
- the price of an individual item, or groups of items of goods or services;
- rebate, liquidated damages and service credit clauses;
- clauses which describe how intellectual property rights are to be dealt with; and
- payment arrangements.
The following types of information may meet the criteria of being protected as confidential information:

- trade secrets;
- proprietary information of contractors (this could be information about how a particular technical or business solution is to be provided);
- a contractor’s internal costing information or information about its profit margins;
- pricing structures (where this information would reveal whether a contractor was making a profit or loss on the supply of a particular good or service); and
- intellectual property matters where these relate to a contractor’s competitive position.


Ibid. (see Appendix C)


This derives from the *Financial Management Act Regulations 1997*, in particular Regulations 8 and 9 that refer to the *Commonwealth Procurement Guidelines*—of which value for money is the overriding principle—and the efficient and effective use of public money.