

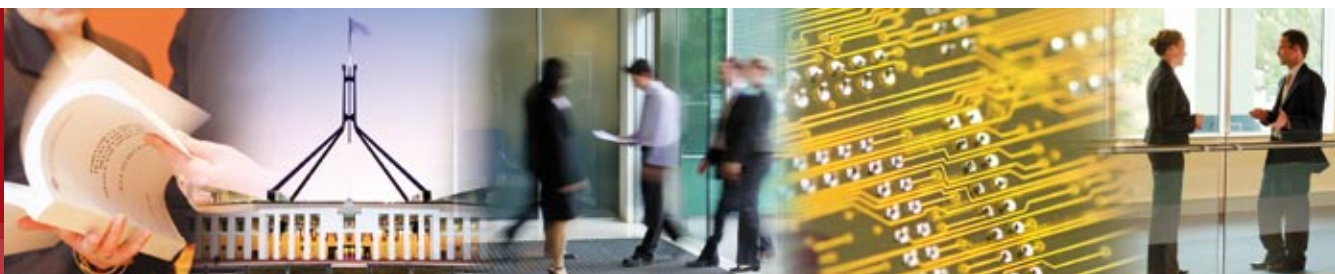


**Australian Government**

**Department of Finance and Administration**

Australian Government Information Management Office

# **Responsive Government** A New Service Agenda



**March 2006**

2006 e-Government Strategy

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Department of Finance and Administration

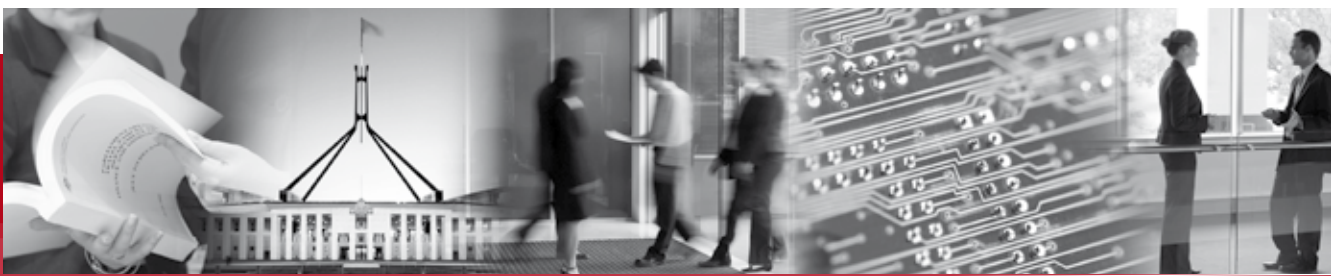
Australian Government Information Management Office

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# **Responsive Government** A New Service Agenda



**March 2006**

2006 e-Government Strategy

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## Foreword

It has been three years since the government released its 2002 e-government strategy, *Better Services, Better Government*.

In those three years, much has been done to achieve the vision outlined in that document, and there is no doubt that Australian citizens do now have “better services” and “better government”.

But more needs to be done.

Despite best efforts, the Australian Government’s application of information and communications technology (ICT) to enable the better delivery of services and better government administration – “e-government” – has been at times ad hoc and uncoordinated.

This is hardly surprising, given that the world of e-government is barely more than a decade old and is continually evolving and changing with the advent of new and more advanced information and communication technologies.

This Strategy attempts to deliver a more co-ordinated and citizen-driven focus to the government’s e-government initiatives.

Building on achievements to date, the Strategy sets ambitious and specific goals and targets, which, if achieved, will not only deliver further benefits to citizens, but will also result in cost savings for government.

E-government is about more than just applying ICT to government processes. It is about applying ICT to reform and improve government processes. Merely applying ICT to something does not make it better. But applying ICT, and reforming the accompanying business processes, does.

This Strategy is not an attempt to centralise e-government initiatives. Rather, it recognises that the devolved nature of the Australian Government presents specific challenges; challenges which must be dealt with through cooperation and sharing, based on a plan that aims to realise the potential of e-government.

I am confident this Strategy is such a plan, and I commend it to you.



THE HON GARY NAIRN MP  
Special Minister of State

one Introduction



one

# one Introduction

Information and communications technology (ICT) is transforming the way government operates and the pace of change will only increase over the next few years. ICT advances can provide better service delivery, while at the same time improving efficiency and reducing the costs of government. Effectively harnessing ICT to achieve this goal is a significant challenge. This strategy, *Responsive Government—a new service agenda*, outlines how the Australian Government will meet this challenge.

The broad agenda was set in 2002 in the initial e-government strategy, *Better Services Better Government*, which mapped out the move toward more comprehensive and integrated use of new technologies for government information, service delivery and administration.

In 2004, the government released its information economy policy document, *Australia's Strategic Framework for the Information Economy 2004 – 2006*. It outlines a whole of government approach to maintaining Australia's position as a leading information economy including a key strategic priority to 'raise Australian public sector productivity, collaboration and accessibility through the effective use of information, knowledge and ICT'.

It is timely for this ambitious strategy to elaborate on that priority and chart how the government will build on progress in e-government to date and move forward towards the vision of a connected and responsive government by 2010. Activities will be in four main areas:

- meeting users' needs
- establishing connected service delivery
- achieving value for money
- enhancing public sector capability.

Considerable work has already been done, with much of the ICT infrastructure and basic online services already in place and many on-the-ground successes. We are now moving into an era where the pace of change will accelerate through technology-enabled transformation of the business of government.

The Special Minister of State, through the Australian Government Information Management Office (AGIMO), will oversee and coordinate implementation of this strategy and track progress towards the 2010 target, in consultation with the Information Management Strategy Committee (IMSC) and the Chief Information Officer Committee (CIOC). The Minister will also liaise with the states and territories through the Online and Communications Council (OCC) to ensure a fully national approach. The benefits will not only be more efficient services for both government and anyone interacting with government—implementing connected government will realise better services and better government, in other words, responsive government.

two The vision for 2010



two

## two The vision for 2010

Australia will maintain its position as a leader in e-government, demonstrating how effective use of technology transforms government into a more efficient and client-oriented sector of the economy.

Through effective use of technology, the government will improve its structures and processes. Online, electronic and voice-based services will be fully integrated into government service delivery. Electronic delivery will underpin all other delivery channels, ensuring a consistent base to all activities and providing consistent service no matter how government is approached.

### 2.1 Meeting users' needs

Government will be regarded as approachable. Government information services will be easy to understand and locate and interacting with government will be quick and straightforward. It will be easy for people to pinpoint the service or information they need, regardless of how and where they initially approach government: every door will be the right door when approaching government. Regardless of which door is chosen, at most only one onwards referral will be needed.

People will be able to choose from a range of service delivery modes, but will prefer the added convenience and functionality of online, electronic and voice-based channels, which they will use frequently. The government will continue to ensure that people with a disability can access government information and services with ease.

Authentication and personal or business information will need to be provided only once through a simplified government sign-on, to access government information and services and for ongoing interactions, transactions and updates. This will be a single sign-on, except where circumstances require otherwise.

It will be possible to group diverse transactions and complete them at the same time, without navigating the underlying structure and complexity of government. People will be able to interact with many areas of government without needing to understand exactly which agencies deliver which services.

Privacy and security rights will be paramount in all service delivery channels offered by government, and will underpin the implementation of this strategy. People will manage the integrity of and access to their own personal details. Anyone unable to do this will be able to nominate agents to manage personal details on their behalf.

The government will increasingly manage its programs and relations with stakeholders electronically, providing organisations and businesses with the same benefits and options of interacting electronically with the Australian Government as citizens will experience – both Australian citizens and those of other countries who need to interact with the Australian Government.

Connected service delivery will amalgamate the requirements of government. This integration, combined with online and electronic service delivery, over time will reduce the cost of interacting with government and in particular will reduce the paper burden on citizens, businesses and organisations, including community organisations.

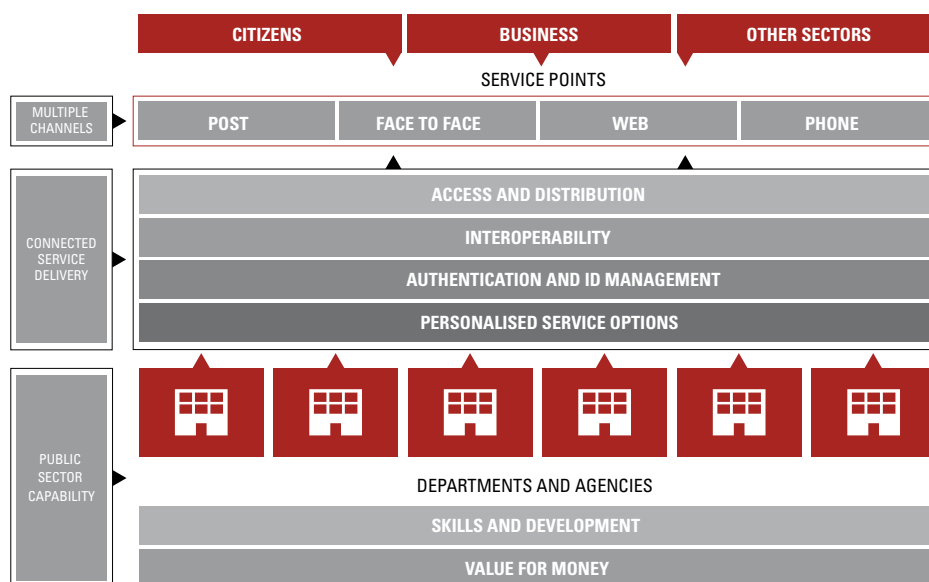
In each year from 2006 to 2010, in support of program outcomes, the government will send ten per cent fewer letters – either paper or electronic – to citizens. By 2010, the government will have halved the number of forms that must be filled in. The nature of forms will also change. Rather than numerous static forms, either electronic or paper, dynamic forms will be available from a single entry point where users can automatically enter required details already held by other government agencies, complete their details electronically, and trace the resulting actions online.

## 2.2 Connected service delivery

Connected government will become a reality and will drive reform of government business processes.

Government will present a consistent and unified face regardless of whether approaches are made in person, over the telephone, using the Internet or any other form of technology. This consistency will address the common frustration associated with trying to understand government structures to find the right agency. The government will match private sector best practice for electronic interactions. This consistency will extend to non-government entities delivering government services. For example, the burden for business will be reduced by increasingly embedding government processes in the natural systems being used by the business community.

**Figure 1. Connected Government - Client's View**



The government will use the opportunities presented by connected government and technology to improve its business processes. It will reform poorly designed and redundant processes and reduce duplication by standardising similar processes across agencies and, where possible, combine those processes. Agencies will operate in a collaborative, connected manner, rather than in isolation from each other.

The considerable benefits from a more connected approach include more agile service delivery and the ability to quickly redeploy services to different sites, including temporary locations. For example, Centrelink can deploy family applications into Medicare Australia shopfronts thanks to the modular design of its systems.

Government's ability to respond to emergencies will also be enhanced. All the parties that need to respond to an emergency situation will be linked and operating under a common framework. For example, the Immigration and Multicultural Affairs, Human Services, and Foreign Affairs departments could share the same information models and emergency information systems.

Connected government using new technology also offers new ways to think about policy and delivery. Recent whole of government policies such as Australians Working Together and Welfare to Work reflect the opportunities provided by information and service connectivity. They illustrate how government can provide a seamless service to people progressing through different stages of initiatives that cross several agencies. As connected government expands and a whole of government approach to systems is adopted, more opportunities like these will arise.

## 2.3 Value for money

A more connected approach to service delivery means more efficient government. Greater use of online, electronic and voice-based service delivery will reduce costs. For example:

- less double handling and fewer errors in initial transactions mean less work down the track to identify and make corrections;
- more informed users require less assistance and can be served more quickly; and
- systems where people maintain their own personal details reduce this direct cost for taxpayers as well as reducing the costs associated with using out-of-date information.

In addition to these service delivery cost reductions, the government's overall use of information technology will be much more efficient. More targeted and strategic investments in technology will see less duplication and more common underlying business processes across different government agencies. Processes will be simpler and more integrated. Projects will be better managed, with reduced cost and time overruns.

Connected government will provide public sector infrastructure better able to deal with outages and disruptions. Much of the necessary infrastructure to ensure business continuity will be a natural by-product of the planning required for connected government. Common standards and extensive connections across government agencies will support shared processing capability and multiple delivery pathways for

dealing with outages. Connected government will also enable processing loads to be shared across agencies, reducing the need for redundant capacity to manage peaks.

Connected government will provide greater opportunities for agencies to share and re-use technology, reducing overall infrastructure costs. Electronic delivery also serves the government's environmental objectives by helping to reduce paper and energy consumption and greenhouse gas emissions.

## 2.4 Public sector capability

The public sector will have the necessary capabilities to deliver on this vision. From 2006, capabilities will be assessed and any gaps or deficiencies addressed, in areas such as public sector ICT skills and recruitment, ICT business practices, ICT procurement processes, knowledge management, project management and delivery, and in accountability and legislative arrangements as they relate to supporting online and electronic service delivery.

**TABLE 1: Progress towards the vision—indicative intermediate and final outcomes**

|                                   | CURRENT SITUATION: 2005–06   | INITIAL PHASE: 2006 – 2008   | FINAL PHASE: 2008 – 2010   |
|-----------------------------------|--|--|--|
| <b>Meeting users' needs</b>       | <p>The government has moved towards a client-focussed service delivery agenda. Government information is readily available online, and an increasing number of services are also available electronically.</p> <p>australia.gov.au provides a convenient interface to government, but transactions with government are still agency-based, and not available through all channels. People often still need to understand how government is structured.</p> | <p>People will only need to tell government once. They will be able to update their details once and make the update available to other agencies, under privacy safeguards.</p> <p>Every door will be the right door when approaching government.</p> <p>australia.gov.au will be the central access point to government, providing basic personal accounts.</p> <p>The capacity to interact with government through other providers will be introduced.</p> | <p>Government services will be widely available through participating private sector providers. People will be able to choose who they contact for government services.</p> <p>Fully functional personalised accounts will be available.</p> <p>Significantly simplified sign-on to government will be available. This will be a single sign-on, except where circumstances require otherwise.</p> |
| <b>Connected service delivery</b> | <p>A few fully connected services are available.</p> <p>For example, <i>e-tax</i> enables individuals to automatically enter account information from selected other government agencies into their electronic tax return.</p>   | <p>High priority common infrastructure required for the final phase will be identified and planned. Building connected government will have commenced from selected agency services, or 'pathway projects'. The number of connected services will be increasing. Agency systems will be designed so that services from different agencies, and selected private sector service providers, can be bundled seamlessly.</p>                                     | <p>Connected government will be fully established.</p> <p>People will be able to package together different services from different agencies.</p> <p>Private sector providers will be able to package government services with their own.</p>  |

|                                 | CURRENT SITUATION: 2005–06   | INITIAL PHASE: 2006 – 2008  | FINAL PHASE: 2008 – 2010   |
|---------------------------------|--|---|--|
| <b>Value for money</b>          | Agencies make independent investment decisions, with little re-use of systems developed by other agencies. More information is needed on the efficiency of government technology investment.                               | A robust ICT investment framework will be established, including online guidance and tools for ICT strategic planning, business case development, and project management. Project management will be improved through Gateway™ reviews. A repository for re-use of government systems will have been established. | ICT investment will be well planned and managed, delivering the responsiveness and value for money required by government. Government investments in technology will have clear benefits and returns.<br><br>There will be widespread re-use of agency systems.  |
| <b>Public sector capability</b> | Achievements and progress to date in the area of e-government indicate that there is a substantial reservoir of capability in the public service, but this reservoir of capability is not yet fully scoped and understood. | A capability stocktake will be completed to identify strengths, weaknesses and gaps.<br><br>Actions to address skills shortages and imbalances will be well underway.   | The public sector will have addressed all gaps in capability, and will be widely recognised as an exemplar in capability development. There will be a 'virtuous circle' between capability and implementation of this strategy, with each reinforcing the other—with capability and skills enhanced as various aspects of the strategy are achieved. |

three Strategic priorities



three

## three Strategic priorities

The government has identified four strategic priorities to guide agencies over the next five years:

- meeting users' needs
- establishing connected service delivery
- achieving value for money
- enhancing public sector capability.

### 3.1 Meeting users' needs

AGIMO's comprehensive June 2005 report, *Australia's Use of and Satisfaction with e-Government Services (Australia's Use)* found relatively high satisfaction levels with current government online services. However, it also revealed low expectations of what can be achieved online, and showed that other channels, such as face-to-face, are still preferred for transactions which are considered more complex or ambiguous.

In response, this strategic priority outlines actions designed to improve people's satisfaction when dealing with government and accessing government services.

*Australia's Use* also found that there is no such thing as 'a typical government user'. The number and diversity of users will increase, and this strategy outlines how the government will address this increasing diversity.

#### 3.1.1 Security and privacy

Building trust and confidence has been a consistent theme of the government's e-government strategies. Respecting and protecting the privacy and information security of citizens, businesses and community and other organisations will underpin all e-government activities. As part of the government's wider set of initiatives to promote a culture of security in relation to e-commerce, AGIMO, in conjunction with the Privacy Commissioner and relevant security agencies, will assist government agencies to understand and implement the government's own legislation and requirements for security and privacy. This will lead to even better protection of people's personal information.

#### 3.1.2 Measuring user needs and preferences

The government will develop a consistent and coordinated approach for agencies to measure the use of and satisfaction with their services. Not only will agencies be better able to respond to user needs, a consistent approach across government will also allow an aggregate picture of use and satisfaction levels, enabling a whole of government approach to meeting the needs of users. The needs of specific groups, such as the disabled, can be better identified and addressed. Government policy development and implementation will be better informed. AGIMO will complement agency-based measurements with annual overall measurements of the use of and satisfaction with e-government services.

### **3.1.3 The Australian Government entry point**

The government will review and consolidate its websites, so that it is easier for people to find what they want. A simpler, more streamlined government online presence will be easier to promote, enhancing awareness and use. The principal entry point to the Australian Government will be [australia.gov.au](http://australia.gov.au), incorporating [publications.gov.au](http://publications.gov.au) and [directory.gov.au](http://directory.gov.au). Other major government entry points will be integrated more tightly to [australia.gov.au](http://australia.gov.au), to further streamline the government's online presence and make it easier to use. The security arrangements for [australia.gov.au](http://australia.gov.au) will be enhanced to match its more prominent role.

### **3.1.4 User accounts and personalised services**

The government will provide individual, personalised accounts through [australia.gov.au](http://australia.gov.au). All users—citizens, citizens of other countries who need to interact with the Australian Government, businesses and organisations—will only need to update details once, with the option for the update to be made automatically across other government agencies. They will also be able to change their government-registered details when interacting with participating non-government service providers.

User accounts will address the growing diversity of people interacting with government. Each will be able to construct a personalised view of government highlighting the services and information most relevant to their needs.

### **3.1.5 Visible and traceable services**

It will be possible to track government transactions in real time. Users will be provided with immediate receipts for transactions which cannot be completed straight away. As part of the reform of government business processes, many more transactions will be completed electronically at the time of commencement than is possible using traditional means.

### **3.1.6 Increasing user awareness of service delivery options**

The Australian Government will promote its electronic service delivery options more prominently, so it is easier to find and access government services. AGIMO will work closely with agencies such as the Department of Human Services, the Department of Employment and Workplace Relations, the Department of Industry, Tourism and Resources, the Department of Health and Ageing, the Department of Education, Science and Training, the Australian Taxation Office and others to increase user awareness. Despite efforts to date including creating facilities such as [australia.gov.au](http://australia.gov.au), *Australia's Use* found a lack of awareness about services available over the Internet. This is a significant barrier to greater e-government uptake and indicates the need to consolidate and more effectively promote government online services.

### 3.1.7 Online engagement with government

The government will set principles for online engagement to support a consistent experience for everyone engaging with Australian governments electronically. The entry point at [australia.gov.au](http://australia.gov.au) will also provide consolidated information about government online consultation and engagement initiatives and how to take advantage of them.

AGIMO will work with government agencies to enhance their understanding and uptake of online engagement, including developing guidelines and better practice guides.

#### **Actions:**

##### ***Initial phase 2006 – 2008:***

- Continue to measure overall use and satisfaction with government services annually.
- Develop a consistent and coordinated approach by agencies to measuring the use of and satisfaction with their services.
- Develop [australia.gov.au](http://australia.gov.au) as the principal Australian Government entry point, including a consolidated entry point to government online engagement initiatives.
- Review and consolidate the number of the government's own websites.
- Provide users with basic individual government service accounts.
- Enable users to track incomplete transactions.
- Promote the government's service delivery options more prominently.
- Establish principles for online engagement, plus practical guidelines and better practice guides.
- Introduce access to government services through selected non-government providers.
- Introduction of limited capacity for users to opt to have their government-registered details updated automatically when they interact with selected non-government service providers.

##### ***Final phase 2008 – 2010:***

- Provide users with fully-functional government service accounts which they can personalise.
- Widespread access to government services through participating non-government providers.
- Users able to opt to have their government-registered details updated automatically when they interact with participating non-government service providers.

## 3.2 Building connected service delivery

The concept of connected government was outlined in the Management Advisory Committee report *Connecting Government: Whole of Government Responses to Australia's Priority Challenges (2004)*. Delivering the vision of connected government by 2010 will require substantial reform of government business processes. It will also require government agencies to implement connected government in a practical way through redesign of their business processes, reform of the associated knowledge management practices and greater cross-agency integration of their information technology systems. Collaboration across agencies must become the norm rather than the exception for the vision to become reality. This strategy outlines actions designed to use the opportunities presented by technology to drive reform of business processes, and to plan and implement connected government.

Transformation and modernisation of government to deliver connected government involves three main areas: technology, business and people. While technology enablement is a key driver of change, all three areas must be considered to ensure meaningful change. Actions relating to technology and business changes are dealt with under this section, while section 3.4 outlines how the government will address the area of people, through enhanced public sector capability.

### 3.2.1 Reform and transformation

The government will reform poorly designed and redundant business processes, and reduce duplication by combining similar processes across agencies. While technology will be an enabler for these reforms, the main effort will be in implementing new ways to undertake government business.

Even if the context or target group varies from agency to agency, many systems and processes are common across government agencies, such as:

- identity management
- registration
- application
- reporting and accountability
- information and content management
- payments.

The Australian Government will work towards common, standardised, modular business processes across its agencies. When new policy proposals that relate to service delivery are submitted by ministers for government consideration, they will also be assessed against their contribution to reforming and improving government business processes, and whether they support the goal of a common business process structure across government. The expectation is that most new policy proposals related to service delivery will demonstrate consistency with the *Access and Distribution Strategy for Australian Government Services (2006)* outlined in Appendix A, and therefore deliver improvements through changes to business processes, particularly through technology enablement.

In other words, connected government means that agencies can no longer operate as isolated silos. Reforms will break down segregated approaches to dealing with citizens, businesses and organisations. Agencies will be required to work together with the intention of providing the best possible service. With collaboration will come responsibilities for agencies, such as vigilance in terms of data quality and the ongoing observance of agreed standards.

### **3.2.2 Technology enablement**

The government will design an overall blueprint or roadmap for how government agencies will use information technology to interact with each other and with citizens, businesses and organisations under connected government. A detailed technical description of the actions related to this strategic priority is at Appendix A.

In brief, the blueprint will comprise:

- technologies, services and business processes that need to be built so that agencies' systems can communicate and interoperate; and
- standards that agencies need to meet to support the use of common technologies, services and business processes across governments.

The blueprint (technically termed 'system architecture') will build on the considerable work done to date to reach agreement on cross-agency interoperability standards. It will also incorporate a stocktake to assess the capability of the public sector to deliver the vision for 2010.

Implementation of the blueprint will be project-based, through a set of 'pathway projects' that will break ground in key areas and can then be scaled up for wider implementation across government. Pathway projects will relate to key components of the vision such as:

- user accounts which can be customised;
- a simplified sign-on facility, which will be a single sign-on, except where circumstances require otherwise;
- connected services, such as when notifying a change of address;
- facilities to allow people to re-use information already submitted to government, such as repeated grant applications; and
- specific technologies, such as mobile connectivity and smartcards.

The projects will start with a limited range of services and government agencies, but will allow for more agencies to participate over time, with a growing range of services. They will be selected to drive strategic investments which fill gaps identified by the stocktake, and to drive reform of government business processes.

The blueprint will plan pathway projects in three distinct areas:

- service delivery to citizens
- service delivery to businesses
- government interaction with community and other organisations and sectors.

This will enable faster progress in implementing the blueprint, while still ensuring overall consistency of systems and services across these three areas, and sharing and reuse of systems. In addition, it will allow for the government to address the legitimate privacy and security concerns of each group, which is essential to achieving connected government. While privacy and security is important for all three groups, the precise concerns, and how to best deal with them, will vary.

### **Actions:**

#### ***Initial phase 2006 – 2008:***

- Initiate a filter for budget processes to ensure that new policy supports the reform of business processes.
- Lay out a blueprint for connected government, which enables and drives the reform of business process reforms.
- Finalise interoperability tools and frameworks.
- Conduct a stocktake of existing government capacity against the blueprint.
- Identify and implement pathway projects.
- Commence technology-enabled transformation of government business processes.
- Start to increase the number of non-government service providers within the connected government framework.

#### ***Final phase 2008 – 2010:***

- Government business processes extensively technology-enabled.
- Extend the number of participating non-government service providers within the connected government framework.
- Pathway projects fully incorporated into whole of government infrastructure to support connected government.

### 3.3 Achieving value for money

This strategic priority outlines how government will improve its ICT investments to gain better value for money. A stronger focus on efficiency will ensure more targeted ICT investment that contributes to and drives reform of government business processes, particularly through re-use and sharing of existing investments across agencies.

#### 3.3.1 A robust investment framework

The government will develop a robust ICT investment framework, improving the quality of:

- ICT strategic planning
- project development and management
- procurement
- evaluation.

The ICT investment framework will be used by AGIMO and other agencies to ensure that ICT investment across government is well planned and managed, and will deliver the responsiveness and value for money required by government. The framework will identify duplicate proposals, and opportunities for collaboration between agencies, contributing to the reform of government business processes.

The framework will guide agencies on business case development, applying the Australian Government Demand and Value Assessment Methodology (DAM/VAM) to a broader range of ICT projects.

The framework will encourage good practice and consistency in ICT strategic planning, by providing access to good practice tools and methodologies. Business cases will be assessed against a good practice review guide to ensure projects are appropriately planned and avoid common causes of project failures.

A mechanism to gather and analyse strategic and procurement plans of agencies that are major investors in ICT will also be included in the framework. This will forecast significant future pressure on the Federal Budget and on the ICT skills market, and help to prioritise whole of government strategic directions and capability development.

The framework will include tools to improve planning and managing that will help achieve measurable benefits and outcomes, including a performance indicator library and resources for designing evaluation strategies. Central reviews of business cases by AGIMO will focus on planning to measure and manage performance and on delivering outcomes.

### 3.3.2 Project management capability

The Australian Government will introduce a new project management process known as Gateway™ to improve the delivery of major projects.

Gateway™ is a project assurance methodology originally implemented by the United Kingdom's Office of Government Commerce in 2000, and has been used in Victoria since 2003. Gateway™ involves short, sharp reviews at critical points throughout a project's life, conducted by reviewers not associated with the project. In this way, it provides an arm's length assessment of the project against its specified objectives and identifies any areas that may require corrective action.

Information technology projects valued over \$10 million and procurement or infrastructure projects valued over \$20 million will be assessed for risk. Where the risk warrants it, the Gateway™ methodology will be applied to those projects. To support agencies and to facilitate the reviews, a small Gateway™ unit has been established in the Department of Finance and Administration. The unit will develop detailed advice for agencies on the application of Gateway™. Reviews will commence in 2006–07 with all projects assessed as medium or high risk, and over the financial thresholds, subject to Gateway™ from 2008–09.

The government will also encourage the establishment of Project Management Offices in government agencies, to improve project management skills and capability in the Australian Public Service.

### 3.3.3 Inter and intra-agency re-use and sharing of systems

The adoption of common, standardised, modular business processes by government agencies is intended to eliminate or change duplicated, redundant and inefficient processes. This will require the re-use and sharing of existing systems.

A repository will be established so that agencies can discover, publish and re-use information, business processes and systems in a trusted environment. One possible repository, GovDex, is being trialled by selected government agencies.

#### **Actions:**

##### ***Initial phase 2006 – 2008:***

- Develop and implement a robust ICT investment framework, including online guidance and tools for ICT strategic planning, business case development, and project management, benefits realisation and evaluation.
- Establish a government-wide approach to project management, involving independent peer reviews for major government projects, including ICT projects.
- Encourage the establishment of Project Management Offices in agencies.
- Implement a repository of business and technical systems implementation, including a catalogue of design solutions, to encourage re-use of existing systems.

##### ***Final phase 2008 – 2010:***

- Adopt common business processes across government agencies.

## 3.4 Enhancing public sector capability

Successful implementation of this strategy will depend on the Australian Public Service having the necessary capability. This strategy outlines how government will enhance the capability of the public sector.

### 3.4.1 Service capability and maturity

The government will measure the extent to which it has the necessary capabilities to deliver the vision, and will assess the maturity of these capabilities, using the *Delivering Australian Government Services—Service Capability Model*, which lists the elements of the government's service delivery capability. This stocktake will identify strengths and address any revealed gaps and weaknesses in capability and maturity. The stocktake will cover the following service delivery requirements:

- people
- business processes
- business continuity
- physical facilities (non-ICT)
- information and communication technologies
- knowledge and information management
- accountability and governance.

This model provides an agreed language to describe, build and improve all those things that enable an agency to deliver efficient and effective services. It will be applied across government to ensure online service delivery is enabled by the maturity of departments' and agencies' capabilities.

### 3.4.2 Skills development

There is increasing recognition in government and industry of the need to ensure Australia has the ICT skills that it requires. The government will increase the ICT skill level of its employees as part of the process of building agencies' service delivery capability and maturity.

Particular emphasis will be placed on raising the level of information technology literacy amongst executives and senior executives. In addition to ICT-specific skills, including technical interoperability and information architecture expertise, skills will be required in a wide range of areas, such as business processes, project management, and security.

Some skills strategies are included here. For example, the ICT investment framework will broaden and deepen the skills base, as will Gateway™. In addition, a systematic process to address recruitment and retention is already being implemented to strengthen skills. AGIMO has partnered with the Australian Public Service Commission (APSC) and other agencies through the Chief Information Officer Committee, to coordinate the newly established working group of the Committee, the ICT Professional and Skills Development Group.

In support of skills development, the government will be a leader in using ICT to design and build more efficient and effective work processes, for example enabling greater and better use of telework (that is, working in locations independent of the central employer or contractor, using ICT to facilitate communications).

### **3.4.3 ICT procurement**

The government will develop procurement plans at the agency and whole of government levels, to promote more strategic and targeted decisions about ICT procurement. An increased preparedness by agencies to collaborate on ICT procurement and systems will help obtain the best prices and deliver improved efficiency and effectiveness.

Industry will also have an important role in improving public sector ICT procurement. In developing its procurement plans, the government will consult fully with industry to draw on private sector expertise.

### **3.4.4 APS employee identity management**

The government will develop a secure identity management framework for government employees and for its contractors, enabling government to streamline access and better account for its own staff. Government security will be enhanced while making it easier for people to move across organisational boundaries and into new organisational arrangements.

### **3.4.5 Enable the legislative framework where necessary**

The government will identify, review and remove any legislative barriers to connected government. The reasons for such barriers will vary and new ways of overcoming them will be found, for example offering connected services while respecting privacy by enabling people using technology to manage their own privacy.

**Actions:*****Initial phase 2006 – 2008:***

- Conduct a stocktake of the extent to which the government has the necessary capabilities to deliver the vision, and assess the maturities of these capabilities.
- Strengthen skills through a systematic process to address recruitment and retention.
- Develop procurement plans which promote good ICT procurement decisions by agencies.
- Implement a secure identity management framework for all government employees.
- Review and address legislative barriers to connected government.

***Final phase 2008 – 2010:***

- All gaps in capacity will have been addressed.
- Public sector capability is reinforced by achievements under the strategy.

## four Implementing the strategy



four

## four **Implementing the strategy**

### **4.1 Using innovative technology**

The government will continue to be an informed user of new and emerging technologies.

#### **4.1.1 Exploit emerging mobile technology**

Mobile devices are one technology with a sufficient level of maturity and immediate potential application. Close to 75 per cent of people in Australia have a mobile phone or other wireless device, and around the same number have access to personal computers (*The Current State of Play (2005) and Information Economy Index (2004)*, Australian Government, Department of Communications, Information Technology and the Arts).

AGIMO will work with government agencies to identify best practice applications of mobile technologies from a whole of government perspective, including areas such as emergency response and law enforcement, education, health care and teleworking opportunities.

#### **4.1.2 Smart cards**

The term 'smart card' has been used to describe a class of credit card-sized chip devices with varying capabilities such as stored-value cards, contact-less cards and integrated circuit cards (ICC). These differ in functionality, both from each other and from the more familiar magnetic-stripe cards. The ICC (more commonly known as the 'chip card' or 'smart card') provides a toolbox of enhanced capabilities for functions such as access control, payment, information storage, management tools and multiple applications. Smart card technology will allow people to access multiple government services more securely, either in-person or online, essentially by providing them with their own miniature computer.

The Australian Government, through AGIMO, is developing a smart card framework for how government agencies can use smart card technology. The primary objectives are to assist Australian Government agencies who want to implement multi-application smart card technology and ensure interoperability through agreed standards.

Establishing an interoperable multi-application smart card environment across the Australian public sector requires agencies to support and commit to the following principles:

- interoperability
- open government system framework
- open standards
- choice and flexibility.

The framework will be part of the blueprint for connected government, discussed in section 3.2, and in more detail in Appendix A.

The states and territories will be consulted through the Cross Jurisdictional Chief Information Officer Committee of the Online and Communications Council to ensure smart card interoperability across all levels of government.

#### **4.1.3 Develop existing innovative infrastructure**

The government will develop and extend its existing substantial investment in innovative technology and infrastructure that supports connected government. For example, FedLink is a system that allows for transactions to be conducted and information exchanged over the Internet in a way that is secure and protects privacy. The government is committed to enhancing this infrastructure through tools such as those that attach and recognise email security classifications.

#### **4.1.4 Assess other emerging innovative technology**

The Australian Government will continue to monitor emerging technologies and their implementation within government, such as has already occurred with Voice over Internet Protocol (VoIP) and natural speech recognition technology. The whole of government opportunities (and risks) these technologies present will be identified, and their potential will be harvested as they move into mainstream practice.

The principles that will underpin the government's approach to technology are:

- technology change will be incremental rather than revolutionary, yet the net effect of these increments will enable far-reaching changes for agencies
- information technology will become ubiquitous, with mobile connectivity widely available, and intelligence embedded in almost all objects
- as the information technology industry becomes increasingly standardised and new technologies become commodities, web services will be a common feature of all business systems, leading to them becoming interoperable
- consistent implementation of open standards by agencies will be essential to realise the potential of standardised and commoditised web services
- new technologies will need a level of demonstrated maturity for widespread adoption in government
- government will continually assess all emerging technologies for their potential whole of government application to electronic service delivery.

## **4.2 Partnering with industry**

The government will maintain an effective dialogue with industry. This will keep industry informed of progress towards the government's vision for 2010. Government will also draw on industry expertise through a series of regular industry forums, by including industry in public sector forums for departments and agencies, and through industry consultation on procurement plans outlined in section 3.4.3.

The government will explore with industry the potential for providing access to government's common, standardised, modular business processes (discussed in sections 3.2 and 3.3.3), so that industry can be better informed of emerging government system and technology requirements. Increasingly, industry will be able to meet the standardised business requirements of government in off-the-shelf product offerings.

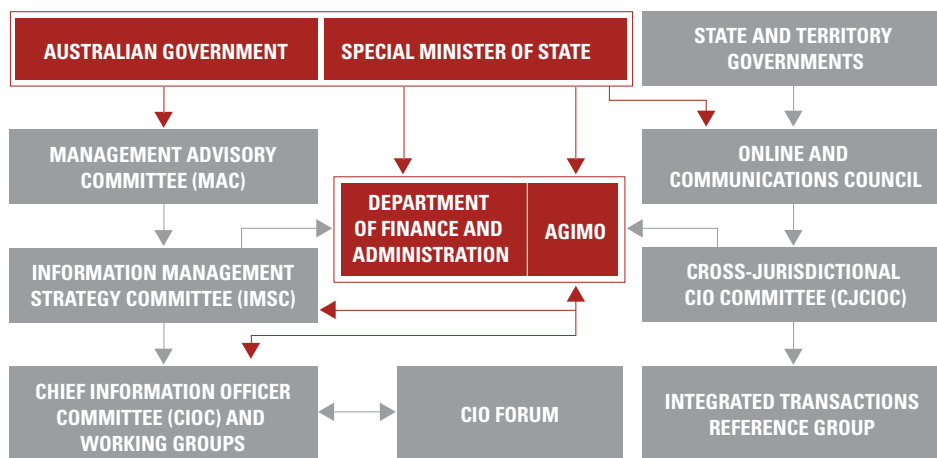
The government will develop a set of model contracts to replace the existing Government Information Technology Contract (GITC) arrangements. These new model contracts will be developed to apply to a range of information technology procurement circumstances, and will be more targeted than the existing GITC arrangements. The government is also implementing new arrangements to cap liability in the majority of ICT contracts and to encourage commercial use and exploitation of intellectual property (IP) from government procurement.

## **4.3 Managing the vision**

### **4.3.1 Governance structures**

The government will maintain and strengthen its existing ICT governance structures, through which its agencies are able to collaborate in the implementation of this strategy, and participate in joint decision-making. AGIMO has overall coordination responsibility for the use of ICT within government. AGIMO reports to the Special Minister of State.

AGIMO is supported by, and supports, the Information Management Strategy Committee (IMSC), the Chief Information Officer Committee (CIOC), the Cross Jurisdictional Chief Information Officer Committee (CJCIOC), and the Online and Communications Council (OCC). These whole of government forums have been central to progress to date, and the government remains committed to them. They ensure that ICT-related decisions reflect the impact and benefits across government rather than just on individual agencies, and that there is collaboration with the states and territories on the implementation of this Australian Government strategy.

**Figure 2. Governance model for government ICT**

### 4.3.2 International context

The government is committed to working collaboratively with other countries to share experiences in the design and implementation of electronic service delivery, both bilaterally and multilaterally. Australia is a strong supporter of the e-government project at the Organisation for Economic Cooperation and Development (OECD), and participates in a range of other relevant multilateral forums, including the Asia-Pacific Economic Cooperation (APEC). Australia also nurtures bilateral cooperation with comparable countries whose experiences most closely parallel our own.

## 4.4 Measuring the impact

### 4.4.1 Develop a set of service delivery metrics

In implementing its vision, the government will build on previous achievements in measuring and tracking progress.

The government will develop service delivery metrics based on the strategic priorities in this strategy, namely:

- user satisfaction levels
- the level of connected government
- value for money
- improvements in public sector capability.

The metrics will be designed to guide progress towards the vision, as well as function as a reporting and accountability tool.



appendix a  
A service oriented architecture



# appendix a A service oriented architecture

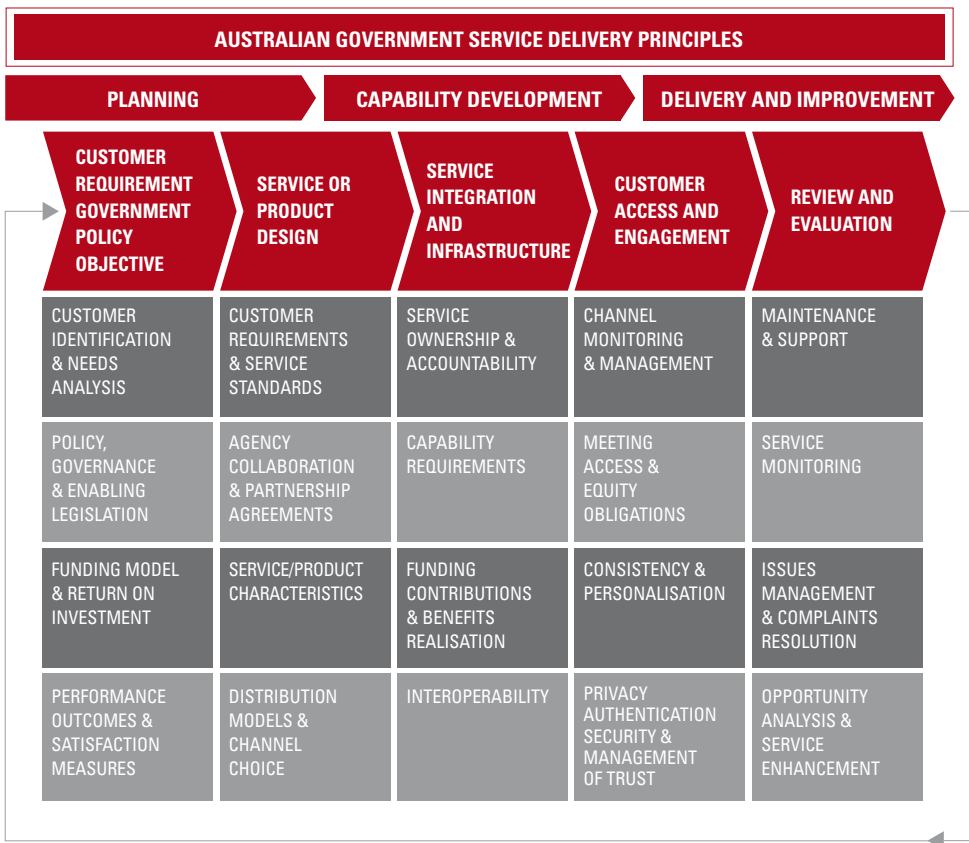
The concept of connected government was outlined in the Management Advisory Committee report *Connecting Government: Whole of Government Responses to Australia's Priority Challenges* (2004).

The detailed vision for connected government by 2010 is outlined in section two of this strategy. To deliver the vision, government agencies will be required to implement connected government in a practical way through their information technology systems and business processes. This strategy includes actions designed to plan and implement connected government.

## A.1 Existing foundations

The government has largely developed the foundations for connected government, as outlined in its *Access and Distribution Strategy for Australian Government Services* (2006).

**Figure 3. Australian government service delivery framework**



The *Access and Distribution Strategy* provides a conceptual whole of government roadmap to the planning, capability development, delivery and review phases.

It incorporates several frameworks which together form the foundations of connected government. They flesh out the detail of the individual elements of the *Access and Distribution Strategy*:

- Delivering Australian Government Services—Service Delivery Capability Model
- Delivering Australian Government Services—Managing Multiple Channels
- Australian Government Technical Interoperability Framework
- Australian Government Business Interoperability Framework
- Australian Government Information Interoperability Framework
- National Service Improvement Program and Framework
- National Interoperability Framework
- Australian Government e-Authentication Framework (AGAF)
- Demand and Value Assessment Methodology.

Despite the availability of these frameworks, the government has not yet taken full advantage of the opportunities presented through its investment in technology. These frameworks are not sufficient on their own. More is needed to enable cross-agency collaboration to occur as a matter of course, rather than only as one-off collaborative projects. What is now exceptional should become the norm.

## A.2 Connected architecture

To guide departments and agencies, the government will develop an architectural model of how its service delivery vision will be implemented using the collection of frameworks and standards in the *Access and Distribution Strategy*—in effect, a cross-agency service oriented architecture (SOA).

A Service Oriented Architecture is a framework, consisting of principles and standards for designing and developing computer systems, so that each service provided by the system exists as a discreet module that can also be used by other systems.

Such an architecture supports standard ways of processing, re-use of systems, interoperability, single sources of authoritative information and improved return on investment.

SOA governance calls for a careful balance between central power and distributed development and operation. The central power must enable interoperability without destroying the benefits gained from distributed, loosely connected services.

Considerable work has already been undertaken on SOA within some government agencies. The cross-agency architecture will build on existing work wherever possible. The cross-agency SOA will not attempt to outline an architecture for the *entire* Australian Government, at least not in the initial stages. It is more practical to divide the cross-agency SOA into three separate architectural clusters, reflecting natural agency and citizen groups:

- service delivery to citizens
- service delivery to businesses
- government interaction with community and other organisations and sectors.

The architecture will not specify to agencies how their entire ICT and business processes need to be structured. An SOA does not mean that all compliant services must be open and readily available for re-use. Access can be restricted. Nonetheless, for the benefit of future flexibility, all services should comply with the cross-agency SOA.

The cross-agency SOA will comprise:

- the technologies, services and business processes that will need to be built so agencies' systems can communicate and interoperate (in other words, those systems and processes necessary to implement connected government)
- the standards that agencies will need to agree to, in order to use the common technologies, services and business processes.

### **A.2.1 Common SOA elements**

Some of the elements of the cross-agency SOA, perhaps most of them, already exist to some extent inside agencies, or are in the process of being designed or constructed. The intention is to identify the required cross-agency components, and determine the extent to which they already exist in a single-agency form.

The following elements are candidates for inclusion in the cross-agency SOA. Current examples from different agencies are highlighted and may be used to kick-start selected pathway projects.

- **Identity management**

Sound identity management will be critical to implementing connected government while respecting privacy and complying with privacy legislation.

In the education sector, the Department of Education, Science and Training has allocated a unique student identifier - called a Commonwealth Higher Education Student Support Number, or CHESSN, to over 700,000 university students for the purpose of administering the Higher Education Support Act. The department is also involved in a Learner Identity Management Framework project which is exploring the case for a national identification framework in education at sectoral, jurisdictional and cross-jurisdictional levels. In the business sector, the Australian Taxation Office provides a business identity validation service to other government agencies.

- **Simplified and single sign-on**

The Department of Human Services is developing an approach to a single sign-on facility which will operate across all of its six agencies. Once developed, it will enable people to sign-on just once to one of the agencies, and then access their accounts in any of the other five agencies. Current work in Centrelink regarding citizen authentication is likely to be central to the approach adopted in the Department of Human Services.

- **User account repositories**

The Business Entry Point, hosted by the Department of Industry, Tourism and Resources, provides the Transaction Manager, a web-based tool accessible via [business.gov.au](http://business.gov.au). It enables businesses to find, manage and complete the forms, applications and transactions they regularly carry out with all levels of government, such as registering for an ABN, applying for licences and paying rates.

Transaction Manager enables users to: search for transactions; group and complete a series of individual transactions; store personal or business details in profiles to automatically pre-fill online forms; and maintain records of completed, incomplete and visited transactions.

The Department of Human Services is actively exploring user account functionality for its six agencies, which would be accessed through the proposed single sign-on facility.

The Australian Business Register is an online service of the Australian Taxation Office that allows businesses to register for an ABN online and update and maintain their registration and personal details. The Australian Business Register also provides a public search facility allowing businesses and individuals to check the registration details of businesses in relation to their presence in the Tax system.

More than 50 per cent of all business registrations are processed in the Australian Business Register through online lodgement.

Interoperability with the State Revenue Offices is at the project scoping stage. If successful, this will streamline processes for business by making single data updates in multiple systems (across agencies). The Australian Taxation Office has targeted July 2006 for implementation.

- **Consent models and systems**

Consent models will be intrinsic to identity management processes, simple and single sign-on facilities and to user account repositories. Under the Australian Government's privacy legislation, the informed consent of citizens, businesses and organisations is essential to agencies' ability to provide connected government. While existing initiatives intrinsically include consent as part of their design, consent models will need their own explicit focus to implement connected government.

- **Authoritative source models and interfaces**

ComLaw, incorporating the Federal Register of Legislative Instruments (FRLI) is the legal information retrieval system owned by the Attorney-General's Department. ComLaw is an integral part of the Australian Law Online initiative to provide the community with low or no-cost access to the law.

Comlaw serves as the Australian Government's legislative authoritative source. It contains Commonwealth primary legislation, as well as other ancillary documents and information, in electronic form. Since 1 January 2005, ComLaw has also contained the FRLI, as the authoritative source for legislative instruments and compilations of legislative instruments.

- **Web services standards and interfaces**

Several agencies are implementing web services and the open standards which underpin web services.

The Australian Taxation Office is using web services and similar techniques to enable individual taxpayers (and from 2006, also their tax agents) to use the 'Etax' electronic tax return lodgement facility to pre-populate their tax returns with net medical expenses information from Medicare Australia, as well as Centrelink entitlement data.

Pre-population is a process of drawing together available information that will allow taxpayers and their agents to correctly complete online transactions such as annual income tax returns.

The Medicare Australia and Centrelink information was provided through Etax on a pilot basis (for a finite group of users) from July 2005 and is expected to be available for all users from July 2006.

These three agencies are also working together to develop the use of Australian Taxation Office data to assist in correctly completing transactions in both Centrelink and Medicare Australia.

Using XML standards, the Business Entry Point at [business.gov.au](http://business.gov.au), hosted by the Department of Industry, Tourism and Resources, shares content with other websites regularly visited by businesses such as banks, industry associations and local councils. Content syndication means business operators no longer need to go from one government website to another in search of information.

The Australian Taxation Office has been working with OASIS (an international open standards development forum) to develop approaches to open standards for tax compliance reporting.

The Australian Taxation Office has endorsed the XBRL (extensible Business Reporting Language) standard. This open standard was initially developed for business and account record keeping. It has been adopted in the Netherlands on the basis of a reduced 'cost of compliance' for their economy. XBRL has been accepted as a standard by the Australian Taxation Office, which will discuss its wider adoption with key stakeholders.

The Department of Education, Science and Training has established an interface with all state and territory State Training Authorities (STAs). The interface allows the electronic exchange of information between these authorities and New Apprenticeship Centres, which are the department's contracted service providers for the New Apprenticeships programme.

The interface already provides for the lodgement of Training Contracts, the primary indenture document for an apprenticeship or traineeship. The electronic interface reduces the time it takes to finalise a training contract from a couple of weeks to a couple of days. Data exchange functionality is being enhanced for broader use including, for example, to facilitate updates of contracts, reduce manual and duplicate data input, improve veracity of data held in discrete systems and improve business processes and service quality to clients and other users.

The data access and exchange uses XML schema agreed between the parties, a secure web access communications channel, and security architecture and authentication provided by the department's Training and Youth Internet Management System.

- **Techniques for exposing all business processes as web services**

The Department of Environment and Heritage, in conjunction with the National Land and Water Resources Audit, is developing an environmental report card system. The system will use web services to draw live data held within both Australian and state/territory government agencies and deliver summarised information on natural resource management themes. This will provide community and government access to the latest natural resource management data at a national scale, from a single source.

The CSIRO and the Department of Environment and Heritage are jointly developing the Australian Biodiversity Information Facility (ABIF). It is aimed at coordinating access to species data in the Australian context. This project involves data sharing via the web between Australian museums and herbaria, as well as between other government agencies and international bodies. Part of the project is to develop or provide access to distributed analytical tools that can draw on this data.

- **'Translation' facilities to enable data from one agency to be used by another**

The Australian Customs Service, with the help of a number of relevant agencies at the Federal, state and territory level, is developing a Standardised Data Set (SDS) to apply across the whole of government to regulate import, export and transit movements of cargo, conveyances and crew.

Fifty-seven agencies at the Federal, state and territory level share an interest in international trade information, with 41 of these agencies requesting data directly from the trading community. Drawing the bulk of these interests together using a common standard and set of definitions for data, and a system where information submitted once is used many times, has significant potential benefits for the trading community and for governments.

The adoption of a standard data set opens the possibility of developing a single entry point for the trade and transport industry to deal online with government. This would allow relevant parties to lodge standardised information and documents at a single entry point to fulfil all import, export and transit-related regulatory requirements.

- **Security standards and modules**

The Protective Security Manual (PSM) and the Australian Government Information and Communications Technology Security Manual (also known as ACSI 33) provide the security framework within which the Australian Government operates. The Australian Government e-Authentication Framework (AGAF), with supporting whole of government authentication standards, provide a consistent, whole of government approach to authentication of businesses that conduct electronic transactions with government bodies. Within these and related frameworks, the Australian Taxation Office public key infrastructure (PKI) provides businesses with digital certificates so they can authenticate themselves to gain access to personalised services within the Business Portal and Electronic Commerce Interface. This infrastructure was developed and implemented prior to July 2000 and is now used by more than 300,000 businesses.

As a result of the review of the Gatekeeper Policy, Australian Taxation Office Digital Certificates can now be used by businesses to access other government agency online transactions.

A pilot extending the use of Australian Taxation Office digital certificates to other agencies commenced on 17 October 2005. Through this pilot, 200 businesses that deal online with Centrelink will use their Australian Taxation Office digital certificates to authenticate themselves and gain access to secure Centrelink services.

Use of Australian Taxation Office digital certificates by businesses to access secure/ authenticated services across multiple agencies will provide major cost savings for the government. More importantly, it means that a business may need only one security 'credential' to deal online with a range of agencies, making interaction with government both easier and more secure.

- **A repository of reusable designs and systems**

Centrelink is trialling a repository of designs and systems called GovDex. GovDex features Reuse-IT—a catalogue of design solutions developed by agencies to respond to challenges of connected government. It will promote information re-use, improvement of technical alignment across agencies, and the rationalisation of development costs.

## **A.2.2 Common standards**

The cross-agency SOA will be based as far as possible on open reference standards that have been developed by international bodies, such as the:

- International Organization for Standardization
- United Nations Centre for Trade Facilitation and Electronic Business
- Organization for the Advancement of Structured Information Standards (OASIS)
- World Wide Web Consortium.

These organisations have established standards in areas such as reliable and secure delivery of messages and semantic standards. While the specifics of most 'e-business' standards differ from government requirements, the general specification will be the same, as will the methods used to create the specific detail. Conforming to these general specifications and methods will maximise interoperability between the government and non-government sectors.

Broadly speaking, the areas where standards will need to be developed and agreed are:

- consistent and repeatable methodologies for deployment
- deployment tools, such as middleware
- content standards, in the areas of
  - taxonomies and ontologies
  - semantic components
  - entities and services.

These standards will need to be supported by items of common infrastructure, such as a component registry, which provides a library of re-usable semantic components. They will also need to be supported by a services registry, which describes services in a consistent way and points to them (but does not actually provide the services).

More details on these standards, particularly the content standards, can be found in the draft *National Government Interoperability Framework* (2006).

### A.3 Capability and maturity stocktake

In parallel with the development of the cross-agency SOA, a comprehensive assessment of the government's service delivery capability and maturity will be undertaken. Capability is defined as 'the sum of all those things that enable an organisation to deliver services'. The capability stocktake will identify opportunities and gaps to be addressed as part of the implementation of the cross-agency SOA.

The stocktake will reflect the *Delivering Australian Government Services—Service Delivery Capability Model*, which lists the elements of the government's service delivery capability as:

- people
  - the organisation's people and their collective skills, experience, tacit knowledge, culture, attitudes, relationships, and needs and expectations necessary to deliver the organisation's services
- business processes
  - the documented practices and processes that underpin service delivery
- business continuity
  - the plans, processes and facilities which enable the organisation to continue to deliver its services, despite unforeseen disruptions
- facilities and equipment
  - the physical facilities and (non-ICT) equipment required to enable service delivery
- information and communication technologies
  - the systems for the communication, capture, classification, storage, management, retrieval and dissemination of knowledge
- knowledge and information management
  - knowledge and information relevant to the responsibilities of the organisation which is applied in delivering services
- accountability and governance
  - the framework to determine accountability and governance for all aspects of service delivery.

This model provides an agreed language to describe, build and improve all those things that enable an agency to deliver efficient and effective services. It will be applied across government to ensure online service delivery is enabled by the maturity of departments' and agencies' capabilities.

The capability inventory will be informed by assembling an inventory of Business Plans and ICT Strategic Plans for key service delivery departments and agencies.

## A.4 Pathway projects

The government will use the cross-agency SOA and the capability stocktake to identify pathway projects. This project-based approach will be more flexible, less risky and will deliver tangible results sooner than attempting a complete 'design and build' approach for the whole of government.

Pathway projects will be selected to drive strategic investments which fill gaps identified by the capability and maturity model. They will provide a well defined route towards the model architecture, by using selected government services and agencies to develop, implement, test and broaden key parts of the cross-agency SOA.

As far as possible, existing services and facilities will be used as the basis of pathway projects. The projects highlighted under the list of possible components of the cross-agency SOA are therefore prime candidates for pathway projects. Other possible pathway projects include:

- a 'straight-through' service built around a set of related organisational or individual life events. Such a service would prove the concept and define the architecture for future like services
- a 'one-time update' service, in which a person would be able to change a piece of information common to multiple agencies. Change of address is often raised as a candidate, but this may have entitlement implications which would make it too complex for an initial pathway project
- a 'no wrong door' project where a service from one agency can be accessed in some way from one, some, or perhaps all, service delivery channels of several other agencies
- a 'user account' project, comprising a user-managed account for personal information that the user can make available to specified agencies as the single source of update. Links with the Business Entry Point's Transaction Manager tool would need to be explored
- a 'generic web-service' project, which could be used by all agencies requiring that service. This could lead to the specification of standard web services as commodities and the building of a common architecture to enhance connectivity.

Each of these projects would be designed to be scaled up, in terms of adding more agencies and services, and interlinked at some stage of their development.



