



Australian Government

Department of Finance and Deregulation

Australian Government Information Management Office

DRAFT: Strategic Vision for the Australian Government's use of ICT

Australian Government Information Management Office

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Executive Summary – The ICT Strategic Vision

“ICT will increase public sector productivity by enabling the delivery of world leading government services for Australian people, communities and businesses, supporting open engagement to better inform decisions, and improving the operations of government.”

Why do we need an ICT Strategic Vision?

Today, the machinery of government depends on ICT. ICT will continue to transform government business and services to meet people’s expectations for better services, and to create a more open Government. Research points to the important role that ICT plays in driving productivity. ICT capital investment has contributed 17.5% of the total Australian productivity improvements since 1985¹ - it therefore warrants our close attention.

The Government’s use of ICT is largely agency focussed. The ICT Reform Program and coordinated ICT procurement arrangements have achieved greater integration, cooperation, and transparency. However, more visibility of the ICT design and investment intentions between government agencies is desirable. Decisions to acquire or upgrade ICT systems should consider the broader implications for government, people and business.

Rapid changes in the technology landscape continue, including the increasing use by business of technology developed for personal use, social media, mobile services, broadband and cloud computing. These changes can profoundly influence government and industry choices for ICT investment and how services can be delivered. The Government needs to balance the potential gains from innovation in ICT with the need to provide stable and reliable operations and services.

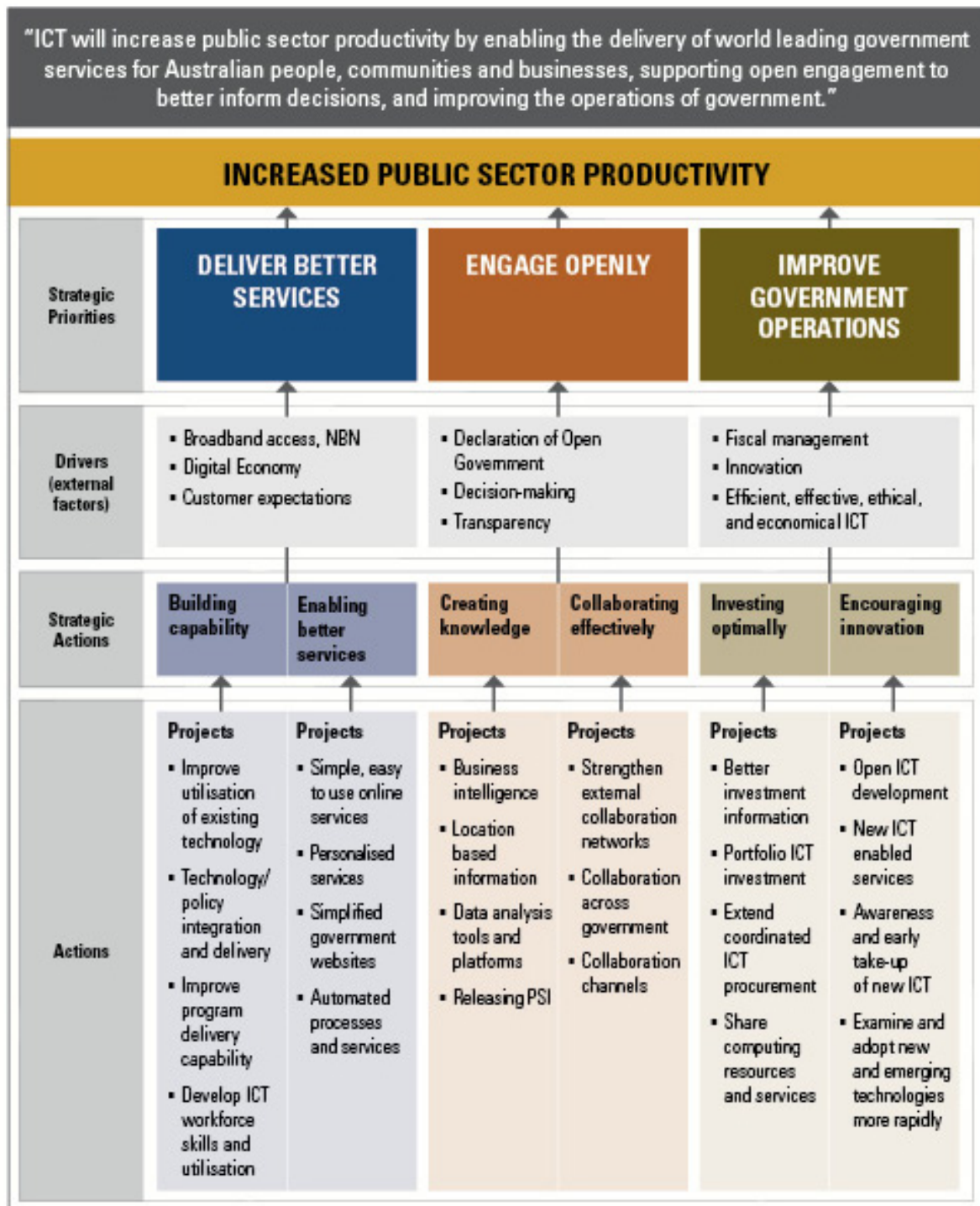
How will the ICT Strategic Vision address these challenges?

The 2011 ICT Strategic Vision refocuses the Government’s ICT priority to improving productivity by delivering better services to people, communities, and business, engaging openly and improving government operations. The Vision is for streamlined interaction within government and between Government, people and business. This builds on and extends the gains made through the ICT Reform Program that focussed on the efficiency of ICT operations and building agency capability.

The Government will deliver the Vision and increase productivity through three strategic priorities – **Deliver better services**, **Engage openly**, and **Improve government operations**. Two strategic actions support the implementation of each strategic priority.

¹ http://www.oecd.org/document/5/0,3343,en_2649_29964795_35954629_1_1_1_1,00.html (Graph, page 23, Contributions to growth of GDP, 1985-20061 and 2001-2006)

Figure 1: The ICT Strategic Vision



A text description of this image is included at [Appendix A](#).

Deliver Better Services

People expect high quality, easy to use government services. Implementing the vision will deliver on this expectation. We will build capability in government to better meet people’s needs and deliver improved services. The Vision builds on the Government’s investment in the National Broadband Network, to improve the delivery of services to all Australians.

The strategic actions to deliver better services are:

- **building capability** across government to use ICT in order to achieve improved services, effectiveness and efficiencies;
- **enabling better services** by using ICT to simplify and integrate government services to both people and business while maintaining necessary security and privacy.

Engage Openly

The Government is committed to the implementation of transparency reforms announced under the Declaration of Open Government and reforms to the Freedom of Information Act. Better access to and use of Government information through services including data.gov.au will support policy analysis and improve government decision making. Government will use Web 2.0 and other tools to build new systems faster, improve collaboration internally and extend its reach outwards.

The strategic actions to engage openly are:

- **creating knowledge** to share and manage information and knowledge to improve decision-making and drive economic growth;
- **collaborating effectively** by building better partnerships to improve the effectiveness of government consultations and service delivery.

Improve Government Operations

Continuing fiscal constraint will require the Government to make the most effective use of existing and new ICT investments. Better understanding how policy implementation influences technology decisions will help achieve greater value. The Vision encourages greater innovation in government operations, to enable cost effective solutions.

The strategic actions to improve government operations are:

- **investing optimally** to enable more effective implementation of policy by targeting ICT investments that deliver the greatest value ;
- **encouraging innovation** so that government can harness the full potential of the digital economy and enhanced technology solutions to deliver services more efficiently and effectively.

I: The Need for Change

The technology landscape is characterised by continuous and rapid change. The internet has changed the way we access travel, banking, information, shopping and government services.

The change has been dramatic and occurred over a very short period of time. This pace of change is expected to continue if not accelerate. Smaller devices, increasingly mobile technologies, technology that predicts what you want based on your personal preferences, will influence delivery of government services.

The Australian Government will use new technologies to deliver better services and to improve government operations. The Government will be an early adopter of technology that will make it easier for people and businesses to access services while carefully considering the risks of new technologies to security and privacy.

next five years.

The technology landscape

Rapid changes in the technology landscape, including the growth in the use by business of consumer technology, mobile services, broadband, and cloud computing are already influencing Government choices on how services can be delivered, and which ICT investments to make.

Consumer technology is in many ways driving the adoption of new tools by government and establishing a platform for innovation. People have high expectations that the services they receive from Government will be the equivalent of private sector offerings. Staff expect that the technology provided in their workplace will be no less capable than that which they use at home.

Broadband networks, fixed and mobile, have become critical enablers to the adoption of many consumer technologies³. This has led to the creation of new capabilities within Government, such as

Australians, our communities and businesses have incorporated technology solutions and the internet into their lives. Our society and economy depend on ICT for services such as banking, online purchasing, invoicing and payment, email and social networking. People and business² expect good quality and highly available government services and measure government performance against private sector services such as banking and airline bookings. ICT is embedded in government operations and, without it, the delivery of government services would not be possible.

Continuing rapid changes to the technology landscape, and opportunities to improve Government operations and service delivery that build on the ICT Reform Program, highlight the need for a new strategic vision for ICT.

ICT has the potential to transform Government business and services to improve productivity, meet people's expectations for better services, and create a more open Government. The 2011 ICT Strategic Vision provides the direction for ICT investment, capability development, and transformation to support and enhance Government services and operations for the

² References to business include not-for-profit and community organisations

³ http://www.acma.gov.au/WEB/STANDARD/pc=PC_312017

the Centrelink Bus. This mobile Centrelink office can support service delivery remotely and in times of crisis. Today, citizens are effectively always online and expect the same of government.

Since 2008, the Government has had a strong focus on improving the efficiency of its ICT operations and building the capability of Government agencies.

The ICT Reform Program delivered improved agency capability to manage large ICT enabled programs, \$1 billion in efficiencies from agency ICT business as usual operations, and will avoid \$1 billion in costs through a coordinated approach to data centres.

The Government continues to use its buying power to drive cost reductions and has already saved in excess of \$50 million from whole of government coordinated procurements of Microsoft licenses and desktop hardware. The Government will consider new coordinated procurement arrangements to achieve more benefits in the future.

The Government will adopt new approaches, such as cloud computing, where appropriate and share technology capabilities across agencies to make better use of investments and deliver greater value for money.

The current Government ICT environment

The ICT Reform Program⁴ has implemented improved capability, focussed attention on ICT sustainability, accelerated a whole-of-government approach to data centres, and provided better information on agency ICT costs. Coordinated ICT procurement has delivered efficiencies in high volume, high cost areas such as Microsoft licensing, telecommunications, desktops and data centres.

Agencies are implementing the Portfolio Programme Project Management Maturity Model (P3M3)⁵ to measure their organisational capability to deliver ICT investments and using this information to plan improvements in capability where required. Large agency ICT enabled investments seeking Budget funding are scrutinised and further refined through the ICT Two-Pass Review process⁶ and their progress monitored through Gateway Reviews. However, a significant portion of agency ICT investment and capability is not visible beyond individual agencies, which restricts opportunities to use existing investments to improve ICT operations.

Decisions about ICT are often focussed on individual agencies. Such technology decisions should fully appreciate the wider implications or opportunity costs and constraining technology options and capabilities.

Similarly, decisions should consider exploring capability that exists elsewhere in government. There is a need to ensure that other decisions - where complex rules can make policy implementation, and the technology that supports it, difficult and expensive to deliver - consider the technology implications.

The review of the implementation of the ICT Reform Program conducted in 2010⁷, found that the "...very substantial implementation effort has positioned the Government for the next phase in the evolution of ICT policy and practice. There has been very substantial effort invested across Government in putting the recommendations of the Gershon Report into practice. The challenge

⁴ <http://www.finance.gov.au/e-government/strategy-and-governance/ict-reform-program.html>

⁵ <http://www.p3m3-officialsite.com/home/home.asp>

⁶ <http://www.finance.gov.au/budget/ict-investment-framework/two-pass-review.html>

⁷ <http://www.finance.gov.au/publications/review-implementation-ict-reform-program/index.html>

now is to leverage that effort to enable Government to deliver different and better services and to engage more closely with its citizens.”

The Government will continue to closely monitor and manage its ICT skills through government-wide ICT workforce planning to ensure the delivery and support of Government programs.

The Government regularly reviews ICT skills levels and monitors the potential impact on the delivery of government services.

Demand for skilled ICT workers is growing while ICT student numbers in tertiary institutions are falling. The Australian Government recognises that a skilled ICT workforce is a critical enabler to improving government operations and enabling better delivery of government services to the community.

The Government is managing its ICT skills with government-wide skills-based programs aimed at attracting, recruiting and retaining skilled ICT staff in the APS. These initiatives include ICT entry-level programs for apprentices and cadets, mentoring programs and an ICT teleworking policy.

The Vision focuses the Government’s use of ICT on increasing productivity by improving service delivery, improving government operations, exploring innovative approaches and novel applications to better meet the needs of citizens, communities and business.

II: The Vision

“ICT will increase public sector productivity by enabling the delivery of world leading government services for Australian people, communities and businesses, supporting open engagement to better inform decisions, and improving the operations of government.”

The 2011 ICT Strategic Vision provides the direction for the Government’s use of ICT for the next five years. It signals a shift of emphasis from ICT efficiency to improved productivity. The Government will use ICT to deliver better services and improve operations and processes aligned with Government policy. More targeted consultation and collaboration, increased availability and use of government information and a stronger understanding of ICT capability will inform Government policy development.

“By 2016, a newer generation of government leaders will measure their IT leaders by the productivity IT brings to the public sector service delivery rather than just the efficiency of IT.”

Peter Sondergaard, SVP, Research, Gartner (16 Nov 2010)

ICT and Productivity

Improvements in government operations and services have a significant effect on the productivity of the nation. The Government’s use of ICT provides an opportunity to improve our national productivity by making government more efficient and streamlining Government processes and people’s interactions with Government. Fewer and simpler interactions with government will allow people and businesses to increase their productivity, and as a consequence, that of the nation. This aligns with the efforts of Government to reduce “red tape” in order to streamline government and business operations and service delivery.

ICT is an important driver of productivity. The Productivity Commission⁸ has identified that investment in ICT capital results in improved labour productivity as well as directly enabling innovation. The OECD has found that ICT capital investment in Australia contributed to 17.5% of total Australian GDP growth between 1985 and 2006^{9,10} an annual average of 0.57%. This effect is supported by various reports and research, including:

⁸ Productivity Commission (2004), ICT use and Productivity: A Synthesis from Studies of Australian Firms. Productivity Commission Research Paper, Canberra

⁹ http://www.oecd.org/document/5/0,3343,en_2649_29964795_35954629_1_1_1_1,00.html (Graph, page 23, Contributions to growth of GDP, 1985-20061 and 2001-2006)

¹⁰ http://www.oecd.org/document/5/0,3343,en_2649_29964795_35954629_1_1_1_1,00.html (Graph, page 23, Contributions to growth of GDP, 1985-20061 and 2001-2006)

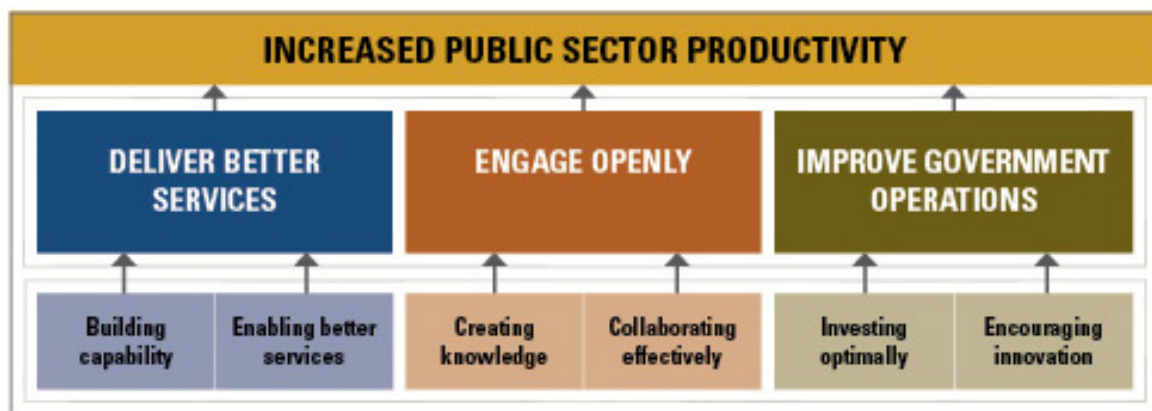
- The 2009 Access Economics reports *Revitalising Australia's Productivity Growth*¹¹ and *The economic benefits of intelligent technologies*, which both identify improvements in productivity arising from the use of intelligent technologies in the electricity, irrigation, health, transport and broadband sectors;
- The *Telstra Productivity Indicator Report*¹², which provides evidence that ICT has improved productivity in the majority of the top 300 Australian companies; and
- The vast majority of witness statements and evidence provided to the Parliamentary Inquiry into raising the productivity growth rate in the Australian economy¹³.

The Council of Australian Governments' National Partnership Agreement identified 27 deregulation priorities¹⁴ to increase national productivity. This demonstrates COAG's commitment to the reforms necessary to boost productivity and workforce participation, and improve delivery of services to the community. ICT is core to achieving these aims. The Standard Business Reporting¹⁵ program is an example of government helping business to reduce regulatory costs. It offers streamlined lodgement of reports and avoids the costs of duplicate reporting to improve the productivity of business and the broader economy.

Strategic Actions

The Vision has three strategic priorities and six strategic actions to support the primary objective of increased productivity. The graphic below shows how these elements align:

Figure 2: Alignment of the Strategic Priorities and Strategic Actions



A text description of this image is included at [Appendix A](#).

Government will deliver better services to support productivity growth through more effective use of the Government's ICT capability. ICT will enable services that are streamlined and easy for people and business to use and will deliver greater productivity.

¹¹ <http://www.accesseconomics.com.au/>

¹² <http://www.telstraenterprise.com/researchinsights/Pages/TelstraProductivityIndicator.aspx>

¹³ <http://www.aph.gov.au/house/committee/economics/Productivity/Report/Final%20Report.pdf>

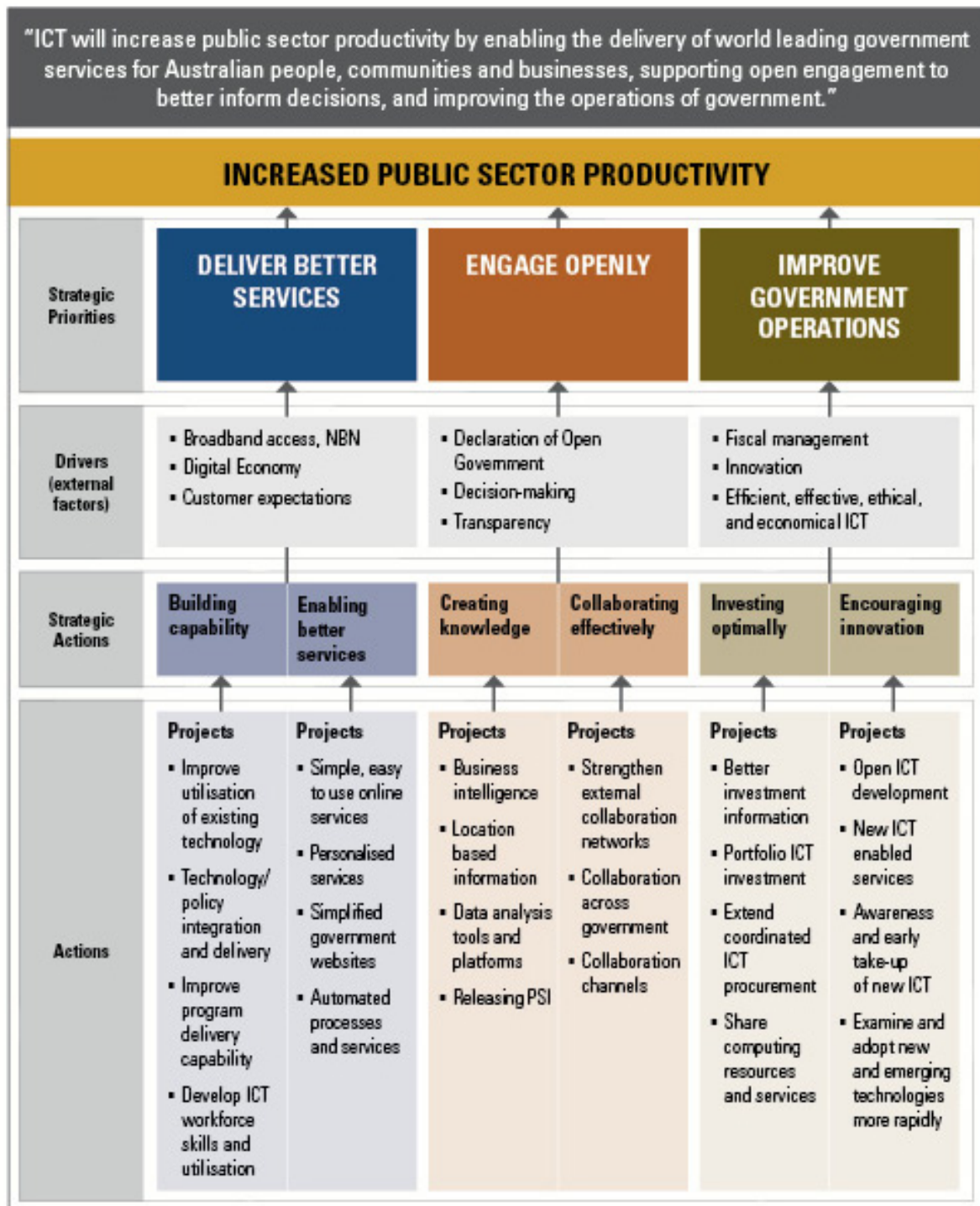
¹⁴ http://www.coag.gov.au/coag_meeting_outcomes/2010-09-10/implementation_deregulation_priorities.pdf

¹⁵ www.sbr.gov.au

Government will use Web 2.0 tools as part of its consultation processes to deliver better services by engaging more effectively with internal and external stakeholders, and making better use of the information arising from interactions.

Government will improve its operations by actively encouraging innovation and making better use of existing and new ICT capability investments. It will improve the way it identifies how to get the most value from its investments. This will include guiding and helping to shape policy choices to better use existing capabilities, speed delivery, avoid unnecessary duplication and complexity, and make best use of new and emerging technologies.

Figure 1 (repeated): The ICT Strategic Vision



A text description of this image is included at [Appendix A](#).

III: Deliver Better Services

The 2011 ICT Strategic Vision promotes simpler, easier to access and use government services where and when people want them, whenever possible. Government will make better use of ICT investments in order to better meet the expectations and needs of people and business, as well as those working in government agencies. The Vision also supports Government priorities, such as the National Broadband Network, by encouraging the improvement and delivery of government services online. This is consistent with the expectations of people and business, and the recent Gov 2.0 and APS reforms. The strategic actions to deliver better, more convenient and easier to use services focus on building and using ICT capability.

Expectations

People and business expect high quality government services that are convenient and simple to use. Our services are frequently judged and measured against those of the private sector, especially banks, airlines and hotels. This means that in developing new policies, Government will work with a broad range of interest groups using a range of targeted consultation approaches, including Web 2.0 tools, to gather views on how policy will best be delivered. Complex policies are often difficult to deliver simply – this is why ICT needs to be considered as an integral part of policy reform, capability development and investment planning.

The Government can use ICT to deliver integrated services to people by enabling a range of “self-service” channels. This includes giving people options to link services across agencies, assisting people to find information and services offered by government, and reducing the ‘red tape’ and compliance burden. Reducing the regulatory burden on people, non-profit organisations and businesses supports increased productivity.

The use of ICT provides opportunities to continue to improve service delivery by moving to a “tell us once” approach. This provides people the option - entirely within the control of citizens - to access government services through a secure logon to government, and joined up government services across Australian, State and Territory, and Local government jurisdictions.

National Broadband Network

The National Broadband Network (NBN) is the largest single investment in infrastructure undertaken in Australia. The Australian Government’s commitment to its construction mirrors the importance Government places on ICT for our future prosperity. The NBN provides a critical enabling platform for further improving the delivery of both current and future government services.

Australian Public Service Reform

The 2009 review of the Australian Public Service (APS) proposed a comprehensive reform agenda in its report “*Ahead of the Game: Blueprint for the Reform of Australian Government Administration*”¹⁶. The recommendations, all of which have been accepted by the Government, build the capability and

¹⁶ http://www.dpmc.gov.au/publications/aga_reform/aga_reform_blueprint/blueprint.cfm

productivity of the APS through increased collaboration and innovation. These improvements will increase the quality of advice to government on and government service delivery.

We will know we have succeeded when

Online services will be easier to access and use, personalised and consistent across government agencies. Agency boundaries will increasingly cease to be visible to people and business. People will increasingly access government online services for the majority of their day-to-day engagements with Government. People's use of government online services and their satisfaction level with services will increase.

Strategic Action One: Building capability

Government will build capability to use ICT in order to achieve improved services, productivity, and efficiencies.

Government ICT capability is critical to the successful delivery of services and achieving improvements in public sector productivity. A significant amount of this ICT capability is either duplicated or under-utilised. The Vision is to increase the utilisation and effectiveness of this capability, with a greater emphasis on meeting the expectations and needs of people and business.

Cloud computing uses internet technologies to deliver computing as a service. Cloud computing is not a new technology. Cloud computing provides a method of accessing software, hardware and storage solutions in a convenient, on-demand and flexible way.

Australian Government agencies may use cloud computing where it provides greater value for money than the alternatives, and is appropriately secure.

While the potential for flexible and cost-efficient computing solutions offered by cloud computing is attractive, the Australian Government will not compromise the security of its operations or the privacy of people and businesses.

Strong governance drives the strategic direction and coordinated use of government ICT assets. The Secretaries ICT Governance Board (SIGB) will continue to support the Government and agencies on whole-of-government ICT priorities, investments, and arrangements. The Department of Finance and Deregulation will continue to play a leadership role in identifying, and building whole-of-government ICT capability.

Where Government has invested in an ICT capability, this capability will be made available to other agencies to avoid duplication and re-work. Strong governance will be applied to common ICT capabilities to reduce fragmentation and duplication. Cloud computing will be used where appropriate, consistent with privacy and security considerations, to add new capability and capacity, as well as drive down costs.

Demographic and social trends point to future technology skills shortages. Since 2007, the Government has had an extensive program in place to address these skills shortages, and this will continue. Where agencies have developed key areas of skill and expertise Government will consider how they can share these skills and expertise across government and with other agencies.

Action program

The actions to implement the objectives of the building capability program are set out below:

1.1	Improve utilisation of existing technology capability	<ul style="list-style-type: none">• Use a lead agency model to develop new technology capability where there are gaps and share technology capabilities across agencies.• Reuse and share investments by increasing awareness and use of existing technology capabilities across agencies.• Simplify and make consistent business processes for common activities across agencies to enable improved and more standardised approaches to service delivery and ICT capability.
1.2	Technology and Policy integration and delivery	<ul style="list-style-type: none">• Build the consideration of ICT capability into policy development and implementation to ensure that policy decisions are delivered in the most effective and timely way and opportunity costs are recognised.
1.3	Improve Government program delivery capability	<ul style="list-style-type: none">• Build capability across Government and its partners to manage and deliver ICT enabled programs and projects
1.4	Develop ICT workforce skills and utilisation	<ul style="list-style-type: none">• Build on existing ICT workforce planning approaches to make better use of the ICT skilled workforce across government.

Strategic Action Two: Enabling better services

Government will enable better services by using ICT to simplify government services to people, communities and business while maintaining necessary security and privacy.

The Government is committed to improving the delivery of services. The Vision is for simple, easy to use services that deliver coordinated transactions to people independent of the structure of government. These services will be available through fewer websites, with australia.gov.au a primary online entry point. People will be able to consent to agencies sharing data, within security and privacy constraints, to enable a “tell us once” approach. This will involve seamless service delivery across Australian, State and Territory, and Local government jurisdictions, over time.

Online services will be simpler and easier to use under appropriate security and privacy constraints. People will be able to complete transactions, when and how best meets their needs, to the extent that technology allows. The NBN, in particular, will make possible the delivery of new online services to people and businesses throughout Australia, including those in rural and remote areas.

People will be able to access services across agencies through a single logon should they wish to link their dealings with various government agencies. Where possible, and based on consent, information and services will be delivered and supported by automated processes.

Australian businesses will have online access to a range of government transactions using published standards and protocols to simplify their dealings with Government.

Action program

To enable better services the following actions will be undertaken:

2.1	Deliver simple and easy to use online services	<ul style="list-style-type: none">• Deliver automated online services that allow people to tell government once of a change in circumstance such as address, and new government service directories to help people find the services they need.• Build on the current australia.gov.au homepage to simplify people's access to government online services.• Provide people and business with a logon that allows them to consent to sharing information so that government can provide better, integrated services.
2.2	Deliver more personalised services	<ul style="list-style-type: none">• Build services to capture, understand, and deliver people's preferences when dealing with government.
2.3	Simplify government websites	<ul style="list-style-type: none">• Reduce the number of websites and exploit online services via the australia.gov.au account.• Create a common look and feel to all government websites that is accessible to all Australians.
2.4	Increase the automation of services	<ul style="list-style-type: none">• Automate processes to improve the interactions between people, business and government.

IV: Engage Openly

The Government is committed to the implementation of transparency reforms announced under the Declaration of Open Government and the Freedom of Information Act. More open, transparent engagement and improved access and availability of government information, as well as being an important goal in its own right, will stimulate more effective consultation and collaboration informing service design. The strategic actions necessary for open and transparent engagement include the greater availability and use of ICT to enable information and knowledge creation, sharing and management.

Openness and Transparency

The Australian Government's Declaration of Open Government¹⁷ requires agencies to reduce barriers to online engagement, undertake social networking and online collaboration projects and support online engagement by employees, in accordance with the Australian Public Service Commission Guidelines.

The Gov 2.0 agenda, lead by the Department of Finance and Deregulation, champions the value of data, transparency, and targeted consultation processes using web tools to support policy development. The Government has created an Australian Office of the Information Commissioner, appointed its first Information Commissioner, and updated the Freedom of Information Act, in part, to meet these aims.

We will know we have succeeded when

The use of web tools to undertake targeted consultations between people and government will be the normal way to support the development of new policies and services. Government will have developed capacity and skills to manage open engagement processes supporting by a range of standard approaches, including Web 2.0 tools. People will have access to high quality data from government and other sources to support this and to help identify new, more productive ways to deliver services.

¹⁷ <http://www.finance.gov.au/e-government/strategy-and-governance/gov2/declaration-of-open-government.html>

The Declaration of Open Government, made in July 2010 formally marked the beginning of the implementation by the Australian Government of its response to the Government 2.0 Taskforce. Working with the Office of the Australian Information Commissioner, agencies are beginning to release more data online at sites like data.australia.gov.au. Agencies are also increasingly using Gov 2.0 techniques to inform and consult with citizens on a range of policy related matters. Early take up has been strong. In early 2011, the blog platform govspace.gov.au supports over 20 agency sites with as many again in development. Other social networking tools have also been used by agencies such as Centrelink and the Department of Broadband, Communications and the Digital Economy to provide information to their stakeholders in both routine and more urgent matters.

While much of the implementation is ahead, some lessons have already been learnt:

- 1** *Focussed consultative periods produce better results than open-ended activities.*
- 2** *The online community, while growing quickly, represents only part of the community as a whole and consultation cannot be restricted to one channel.*
- 3** *Social networks are generally self-regulating over time but vocal, even strident, commentators can sometimes dominate conversations in the short term. Management of these conversations, including effective moderation, is a key skill.*
- 4** *The immediacy of the online platform, while accelerating timelines, cannot be allowed to overwhelm other work. Expected response timings and methods need to be clearly outlined at the outset.*

The vision reflects these lessons in outlining how the Government will use Gov 2.0 to improve engagement with Australian people, communities, and businesses.

Strategic Action Three: Creating knowledge

Creating, sharing and managing information and knowledge to improve decision-making and drive economic growth.

Government manages extensive information and knowledge resources that are critical to policy development and decision making enabling government services to be targeted based on need. As recognised by the Gov 2.0 Taskforce¹⁸, this data also has additional economic value that can only be realised when it is made available to those that can benefit from it. This view of the additional value that can be generated by greater access and availability to information and knowledge resources can also be applied to Government itself. Government will in future make better use of its information and knowledge resources (within necessary security and policy constraints) to inform policy decisions and improve service delivery and the operations of government.

Government will capture and publish data using agreed standards and build skills both internally and externally to interpret information and knowledge resources to improve policy and services.

¹⁸ <http://gov2.net.au/>

Respecting and protecting the privacy and information security of Australian people, community and business is fundamental to government operations and service delivery.

As part of the Government's broader initiatives to improve online security, agencies will continue to work with the Australian Information Commissioner and relevant security agencies to protect personal and sensitive information.

The Government will continue to enhance the security of government systems to build Australians' trust and confidence in government operations and service delivery.

Government will continue to make data available to people and business through data.gov.au to drive greater openness and transparency in support of the goals expressed in the Declaration of Open Government. Increased availability of government data will optimise its economic and social value and enable third parties to use information and knowledge resources to innovate and create additional value.

The Government will also make greater use of location-based information to inform policy development and service delivery.

Action program

To create the proposed knowledge based environment the following actions will be undertaken:

3.1	Build business intelligence	<ul style="list-style-type: none"> With regard for privacy and security, create a holistic view of customer needs within government to improve targeting and delivery of services.
3.2	Use location based information	<ul style="list-style-type: none"> Develop standards and a whole-of-government direction for the use of location based information across agencies.
3.3	Develop tools and platforms to analyse data	<ul style="list-style-type: none"> Create capability within government to capture, share as appropriate, and analyse customer information so that trends can be identified and used to better inform policy development.
3.4	Release public sector information	<ul style="list-style-type: none"> Continue the Gov 2.0 release of government data publicly for wider use to share information and knowledge resources and unlock economic and social value.

Strategic Action Four: Collaborating effectively

Government will build better partnerships and use Web 2.0 tools to undertake targeted consultations to improve policy decisions, service delivery, and ICT investment outcomes.

The Government will build on existing partnerships and approaches to collaboration both within and external to government. Government will conduct targeted consultations with people, communities and businesses using tools such as blogs, wikis, social networking sites and micro blogging.

Government will use this information as one of several methods to identify existing needs and future trends to improve services and policies, and drive innovation.

Web 2.0 tools enable communities of interest to develop rapidly and to find people with local knowledge or technical expertise to build understanding of issues and solve problems as they emerge. They enable communities to filter information on the internet and identify the most useful information to meet their needs. They also enable people to find the most knowledgeable and valuable contributors in any given subject area, from those with international professional and academic reputations to those who possess significant local and community subject matter knowledge and expertise¹⁹.

Government will use Web 2.0 tools to engage in a targeted way with business, academic, and other expert groups to address service delivery challenges. Government will promote the development of these engagements through the targeted use of social networking tools and the technology demonstrator programs. Policies will be informed by new and emerging ICT capability and innovation.

Action program

The following actions will be undertaken to improve the effectiveness of government collaboration:

4.1	Strengthen external collaboration networks	<ul style="list-style-type: none"> • Use Web 2.0 and other tools in a targeted way to engage with people and business to improve policy development and service delivery. • Actively participate in external blogging forums to promote wide community engagement.
4.2	Build collaboration capability across government sector	<ul style="list-style-type: none"> • Create online communities of expertise based around common business processes to develop and share standardised approaches.
4.3	Build the channels needed for government to collaborate	<ul style="list-style-type: none"> • Explore partnerships with industry, academics, the community and third sector, and with agents and brokers to inform policy and deliver services.

¹⁹ <http://www.finance.gov.au/publications/gov20taskforcereport/summary.htm>

V: Improve Government Operations

The Vision focuses on improving the productivity of government operations through more targeted ICT investment enabling more efficient and effective business processes. Continuing fiscal constraint

ICT coordinated procurements establish whole-of-government arrangements for the purchasing of commonly used ICT goods and services.

Existing Australian Government ICT coordinated procurement arrangements for desktop computing, telecommunications, data centre services and software have delivered savings to agencies of up to 30 per cent on previous costs.

The Australian Government remains committed to deliver efficiencies and savings in ICT costs where possible, to increase the standardisation of government technology purchasing, and to simplify the process for suppliers and vendors.

In consultation with the Australian Information Industry Association and the Australian Industry Group, the Government has also developed a set of Principles of Engagement on ICT to help improve the operation of the government ICT marketplace.

will place pressure on Government, at least in the medium term, to make better use of ICT capability and investments. The strategic actions necessary to improve government operations involve better targeting ICT investment to drive greater efficiency and productivity in government operations and encouraging innovation by government and third parties. This will result in:

- better-informed executives, managers and governance bodies,
- well analysed and soundly developed investment proposals,
- awareness and understanding of alternative approaches and solutions, and
- better awareness of the cost implications of decisions on other parties and policies, especially where ICT choices impose costs elsewhere or reduce the flexibility or value that can be delivered.

Fiscal constraint

As a result of the Global Financial Crisis most OECD countries are applying significant fiscal restraint as they attempt to recover from the downturn in the

global economy. The Global Financial Crisis coincided with the Government's ICT Reform Program that included a strong focus on the efficient use of ICT in business as usual activities and coordinated procurement of ICT. The Government's medium term fiscal strategy²⁰ requires continued strong fiscal discipline, and the need to maximise the return from existing ICT capability and future investments.

Innovation

The 2009 Department of Innovation, Industry, Science and Research publication *Powering Ideas: An Innovation Agenda for the 21st Century*²¹ sets out a ten-year vision to strengthen innovation and increase productivity. It identifies the importance of ICT and business management to innovation. The Management Advisory Committee's report *Empowering Change*²² suggests options for how the

²⁰ <http://www.budget.gov.au/2010-11/content/myefo/html/index.htm> (page 24)

²¹ http://www.innovation.gov.au/innovationreview/documents/poweringideas_fullreport.pdf

²² <http://www.apsc.gov.au/mac/empoweringchange.htm>

Australian Public Sector can use innovation to improve the quality of policy and service delivery outputs. Research conducted by the OECD²³, supported by local organisations^{24,25}, demonstrates that ICT has a significant impact on both product and process innovation.

The efficiency and effectiveness of government operations.

Better decisions when investing in ICT can reduce the costs of administration and delivering services. Accordingly, good Government policy and service design must be informed by ICT capability. This includes opportunities to ensure implementation options, cost, user value, and experience, and desired program outcomes are properly considered.

Better, more informed, decisions when investing in ICT can significantly reduce the costs of administration, service delivery and enterprise debt.

We will know we have succeeded when

Government ICT investments are targeted based on need and value. Policy development will recognise the opportunity cost to government, people and business. ICT capabilities will be used by multiple agencies under agreed governance arrangements. Government will use new and innovative approaches based on technologies that improve operations and services. Government ICT performance measured through annual ICT benchmarking reports will reflect consistent, efficient operations.

Strategic Action Five: Investing optimally

Government will invest optimally by targeting ICT investment to the areas that deliver the greatest value and enable a better, more effective implementation of policy decisions.

Government has rigorous ICT investment processes that include benchmarking, and the ICT Two-Pass Review Process. The Vision builds on this through greater coordination of ICT investment planning while maintaining the balance between a distributed and central approach – balancing the need for innovation with the need for greater commonality, efficiency, and re-use.

To achieve this balance there will be more transparency around the Government's ICT activities, investments and plans, especially for common or generic systems such as human resource and financial management. Annual ICT benchmarking will be refined to provide detailed information on agency ICT activities, investments and plans. Greater transparency of agency ICT activities and plans will lead to better strategic investments focussing on, in order of preference, re-using existing capability, modifying existing capability or buying or building new capability for use across multiple agencies. This will include consideration of how best to deliver ICT capability to smaller agencies.

Greater transparency of existing ICT activities and investments will also better inform policy decisions. Government needs to understand the true cost and implications of policy options and the consequences that might arise from decisions when they are implemented in ICT systems.

²³ <http://is.jrc.ec.europa.eu/pages/ISG/modelling/documents/Brussels29.09.10MeasuringtheImpactofICT.pdf>

²⁴ http://www.dbcde.gov.au/digital_economy/future_directions_of_the_digital_economy/australias_digital_economy_future_directions/final_report/australias_digital_economy

²⁵ <http://www.aiaa.com.au/docs/AIIA%20and%20the%20ICT%20Industry/Green%20IT%20White%20Paper/AIIA%20Low%20Carbon%20Economy.pdf> (see page 4)

The use of commodity hardware, off-the-shelf software, virtualisation, and cloud computing, for example, will drive increased capability and efficiency through reduced customisation and integration costs. Extending the coordinated approach to ICT procurement will allow for greater efficiencies during product procurement and refresh. Government will continue to use its advantage as a large-scale purchaser of ICT to reduce the duplication of agency procurement effort and simplify suppliers' involvement in procurement.

Action program

The actions to achieve the objectives of the proposed investment program are set out below:

5.1	Better Investment governance and information	<ul style="list-style-type: none"> • Increase the visibility of agency ICT activities, investments and plans to reduce duplication. • Improve ICT investment by considering alternate approaches, and greater acceptance of risk on the ability to deliver effective value for money solutions.
5.2	Portfolio ICT investment	<ul style="list-style-type: none"> • Develop a portfolio approach to strategic ICT investments. • Target ICT investments to develop and use whole-of-government capabilities.
5.3	Extend coordinated ICT procurement	<ul style="list-style-type: none"> • Target new areas for coordinated ICT procurement to reduce costs and remove duplication while delivering current initiatives such as the data centre strategy.
5.4	Share computing resources and services	<ul style="list-style-type: none"> • Consider cloud computing to improve the efficiency and effectiveness of government's ICT operations. • Explore opportunities for shared back-office corporate IT operations and ICT services.

Strategic Action Six: Encouraging innovation

Government will encourage innovation to harness the full potential of the digital economy and technology innovation.

The Government has a significant program of work underway to foster innovation. The Departments of Innovation, Industry, Science and Research and Education, Employment and Workplace Relations, the Commonwealth Scientific and Industrial Research Organisation (CSIRO), and National ICT Australia (NICTA) all contribute to the development of innovative ICT solutions for government and the broader economy.

The Government will use information about people's expectations and preferences to identify and inform the development of new services, and improve existing services. New business models enabled by technologies such as cloud computing and the NBN, will be used to build efficient, flexible, and responsive systems to deliver innovative services to people, communities and business.

Government, in partnership with the ICT industry, will use technology demonstrator hubs to build and trial innovative services and processes to address the complex service delivery challenges that it faces. Government, where appropriate, will test these innovations through a concept viability program with industry before going to market to tender for solutions. Government will also seek innovative options from its strategic partners in the ICT and related industries.

The growth in public sector information available on data.gov.au will allow third parties to develop innovative applications and services to complement government services. Engaging with people using Gov 2.0 and other contemporary engagement and communication approaches when developing policies and services will encourage innovation. Having people participate in this way will generate a whole range of ideas and possibilities for application in the public sector.

Action program

To achieve the innovation aims the actions below will be initiated:

6.1	Open ICT development to foster innovation	<ul style="list-style-type: none"> • Generate ideas through challenges and competitions, such as GovHack and MashupAustralia, to create opportunities for external and internal ICT innovation.
6.2	Deliver new and better ICT enabled services	<ul style="list-style-type: none"> • Use the NBN to make more government services available online.
6.3	Increase awareness and early take-up of new ICT	<ul style="list-style-type: none"> • Use Technology Demonstration Hubs, in partnership with industry, to seek and share information about new technologies.
6.4	Examine and adopt new and emerging technologies more rapidly	<ul style="list-style-type: none"> • Quickly adopt new ICT models through a risk-based approach that balances issues of performance, usability, security, privacy and investment. • Promote the use of flexible development methodologies, and agency based innovation communities of practice so that new technologies and ideas can be deployed rapidly and assessed for their business use.

VI: Implementing the ICT Vision

The Implementation Road Map

Strategic Priority: Deliver Better Services; Strategic Action: Building Capability

Serial	Actions	Activities	Timeline
1.1	Improve utilisation of existing technology capability	Use a lead agency model to develop new technology capability where there are gaps and share technology capabilities across agencies.	2012 onwards
		Reuse and share investments by increasing awareness and use of existing technology capabilities across agencies.	2012 onwards
		Simplify and make consistent business processes for common activities across agencies to enable improved and more standardised approaches to service delivery and ICT capability.	2013 onwards
1.2	Technology and Policy integration and delivery	Build the consideration of ICT capability into policy development and implementation to ensure that policy decisions are delivered in the most effective and timely way and opportunity costs are recognised.	2012
1.3	Improve Government program delivery capability	Build capability across government and its partners to manage and deliver ICT enabled programs and projects	2011 onwards
1.4	Develop ICT workforce skills and utilisation	Build on existing ICT workforce planning approaches to make better use of the ICT skilled workforce across government.	2011 onwards

Strategic Priority: Deliver Better Services; Strategic Action: Enabling better services

Serial	Actions	Activities	Timeline
2.1	Deliver simple and easy to use online services	Deliver automated online services that allow people to tell government once of a change in circumstance such as address, and new government service directories to help people find the services they need.	2012 onwards
		Build on the current australia.gov.au homepage to simplify people's access to government online services	2011 onwards
		Provide people and business with a logon that allows them to consent to sharing information so that government can provide better, integrated services.	2012
2.2	Deliver more personalised services to people	Build services to capture, understand, and deliver people's preferences when dealing with government.	2012 onwards
2.3	Simplify Government websites	Reduce the number of websites and exploit online services via the australia.gov.au account.	2013
		Create a common look and feel to all government websites that is accessible to all Australians.	2013
2.4	Increase the automation of services	Automate processes to improve the interactions between people, business and government.	2011 onwards

Strategic Priority: Engage Openly; Strategic Action: Creating knowledge

Serial	Actions	Activities	Timeline
3.1	Build business intelligence	With regard for privacy and security, create a holistic view of customer needs within government to improve targeting and delivery of services.	2013 onwards
3.2	Use location information	Develop standards and a whole-of-government direction for the use of location based information across agencies.	2012 onwards

3.3	Develop tools and platforms to analyse data	Create capability within government to capture, share as appropriate, and analyse customer information so that trends can be identified and used to better inform policy development.	2013 onwards
3.4	Release public sector information	Continue the Gov 2.0 release of government data publicly for wider use to share information and knowledge resources and unlock economic and social value.	2011 onwards

Strategic Priority: Engage Openly; Strategic Action: Collaborating Effectively

Serial	Actions	Activities	Timeline
4.1	Strengthen external collaboration networks	Use Web 2.0 and other tools in a targeted way to engage with people and business to improve policy development and service delivery.	2011 onwards
		Actively participate in external blogging forums to promote wide community engagement.	2011 onwards
4.2	Build collaboration capability across government sector	Create online communities of expertise based around common business processes to develop and share standardised approaches.	2011 onwards
4.3	Build the channels needed for government to collaborate	Explore partnerships with industry, academics, the community and third sector, and with agents and brokers to inform policy and deliver services.	2011 onwards

Strategic Priority: Improve Government Operations; Strategic Action: Investing Optimally

Serial	Actions	Activities	Timeline
5.1	Better Investment governance and information	Increase the visibility of agency ICT activities, investments and plans to reduce duplication.	2011 onwards
		Improve ICT investment by considering alternate approaches, and greater acceptance of risk on the ability to deliver effective value for money solutions.	2012 onwards
5.2	Portfolio ICT investment	Develop a portfolio approach to strategic ICT investments. Target ICT investments to develop and use whole-of-government capabilities.	2012 onwards
5.3	Extend coordinated ICT procurement	Target new areas for coordinated ICT procurement to reduce costs and remove duplication while delivering current initiatives such as the data centre strategy.	2011 onwards
5.4	Share computing resources and services	Consider cloud computing to improve the efficiency and effectiveness of government's ICT operations.	2011 onwards
		Explore opportunities for shared back-office corporate IT operations and ICT services.	2012 onwards

Strategic Priority: Improve Government Operations; Strategic Action: Encouraging Innovation

Serial	Actions	Activities	Timeline
6.1	Open ICT development to foster innovation	Generate ideas through challenges and competitions, such as GovHack and MashupAustralia, to create opportunities for external and internal ICT innovation.	2011 onwards
6.2	Deliver new and better ICT enabled services	Use the NBN to make more government services available online.	2012 onwards
6.3	Increase awareness and early take-up of new ICT	Use Technology Demonstration Hubs, in partnership with industry, to seek and share information about new technologies.	2013 onwards

6.4	Examine and adopt new and emerging technologies more rapidly	Quickly adopt new ICT models through a risk-based approach that balances issues of performance, usability, security, privacy and investment.	2012 onwards
		Promote the use of flexible development methodologies, and agency based innovation communities of practice so that new technologies and ideas can be deployed rapidly and assessed for their business use.	2012 onwards

Implementation Governance

The 2011 ICT Strategic Vision provides the Government's vision and direction for the use of ICT for the next five years.

Financial Management and Accountability Act 1997 (FMA Act) agencies will implement the Vision and the Government's ICT work program. Defence and Australian intelligence community agencies will implement the strategic actions of the Vision that are relevant to them in respect of their administrative, financial, personnel and other non-specialist and non-defence capability ICT systems.

The Secretaries' ICT Governance Board (SIGB) will continue to support the Government and agencies on whole-of-government ICT priorities, investments, and arrangements. The SIGB will oversight the implementation of the 2011 ICT Strategic Vision and the Government's ICT work program. The SIGB has a close link with the Secretaries Committee on Service Delivery, particularly for ICT enabled improvements to government services.

The Chief Information Officer Committee (CIOC) reports to SIGB. CIOC considers ICT matters including technical, operational and business related issues and provides advice and guidance to SIGB. Groups of agency senior executives will also bring a greater business focus to specific matters when required.

The Australian Government Information Management Office (AGIMO), in the Department of Finance and Deregulation plays a key role in driving the efficiency and effectiveness of the Government's use of ICT. AGIMO has a significant role in implementing specific reforms including coordinated ICT procurement, the Gov 2.0 agenda, data centre consolidation and ICT investment management. Building on its lead agency role, including for the adoption of Gov 2.0 across government, AGIMO will collect and analyse information to assist the Government and SIGB in setting future directions.

AGIMO will work with agencies to develop detailed implementation approaches that deliver the strategic priorities and improve productivity. AGIMO will advocate strategies to SIGB and the Government for endorsement.

AGIMO will work closely with stakeholders within and external to government to implement the Vision, including with agency CIOs, the National Security CIO and the Australian Government security community, the Australian Information Commissioner, ICT vendors and ICT industry representative groups, and the third sector.

A small, dedicated program management office in AGIMO will assist SIGB to govern the implementation of the 2011 ICT Strategic Vision. AGIMO will play a critical role in working with agencies and governance boards to ensure that the Vision is delivered.

Appendix: Text descriptions of images

Figure 1: The ICT Strategic Vision

This figure is a visual representation of how the ICT Strategic Vision describes Government use of ICT to improve public sector productivity by:

- enabling the delivery of world-leading services for Australian people, communities and businesses;
- supporting open engagement to better inform decisions; and
- improving the operations of Government.

There are three strategic priorities and six strategic actions outlined in the Vision.

The first strategic priority is to *Deliver better services*.

- The external drivers influencing the strategic priority to *Deliver better services* include increased use of broadband, development of the National Broadband Network, the growing digital economy and changing customer expectations.
- The strategic actions supporting the strategic priority to *Deliver better services* are *Building capability* and *Enabling better services*.

The second strategic priority is to *Engage openly*.

- The external drivers influencing the strategic priority to *Engage openly* include the Declaration of Open Government, collaborative decision making and increased expectations of government transparency.
- The strategic actions supporting the strategic priority to *Engage openly* are *Collaborating effectively* and *Creating knowledge*.

The third strategic priority is to *Improve Government operations*.

- The external drivers influencing the strategic priority to *Improve Government operations* include fiscal management requirements, expectations of innovation and the need to ensure efficient, effective and economical use of ICT in government.
- The strategic actions supporting the strategic priority to *Improve Government operations* are *Investing optimally* and *Encouraging innovation*.

[Part VI – Implementing the ICT Vision](#) outlines specific agency and whole-of-government activities and projects that will deliver the Vision.

Figure 2: Alignment of the Strategic Priorities and Strategic Actions

This figure show how the three strategic priorities and six strategic actions of the vision align to support the objective of increased public sector productivity.

1. The strategic actions aligned to the strategic priority "*Deliver better services*" are "Building capability" and "Enabling better services".
2. The strategic actions aligned to the strategic priority "*Engage openly*" are "Collaborating effectively" and "Creating knowledge".

The strategic actions aligned to the strategic priority "*Improve Government operations*" are "Investing optimally" and "Encouraging innovation".