



NSW GOVERNMENT ICT STRATEGY 2012





NSW Government ICT Strategy 2012

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FOREWORD FROM THE MINISTER

The NSW Government is putting the citizen at the centre of decision making and transforming the way it provides services.

NSW residents are tech savvy and they expect their Government to move with the times, providing the services they need in the ways they need them. Whether it is through one stop shops or whole of Government apps, we need to make it as easy as possible for residents to interact with Government.

Information and Communications Technology (ICT) provides an avenue to better deliver services to residents while at the same time enabling Government to be more flexible and efficient in the conduct of its business.

We are committed to making it easier for NSW citizens to interact with Government, to harnessing the opportunities provided by ICT to improve Government operations and to developing the ICT industry in NSW.

Improving the way we use ICT to deliver government services requires a comprehensive ICT strategy that applies across the public sector with strong governance arrangements to drive it.

We have elevated ICT to be one of the highest priorities of Government, establishing a Governance structure that means core agencies have responsibility for ICT priority setting and decision making. We have also given industry a seat at the table to ensure government is kept up to date with emerging technologies and new solutions to service challenges.

The *NSW Government ICT Strategy 2012* is a culmination of the best minds in ICT in NSW Government, the private sector, and the community coming together to map a way forward. To tackle the issues that need to be tackled. To bring NSW out of the dark ages and into the 21st century.

It is an ambitious strategy with no easy or quick fixes. It focuses on how we better use the \$2 billion spent on ICT by the NSW Government every year to achieve our goals and defines a list of programs and initiatives to get there. Importantly, we aim to increase competition while reducing the time, costs and risks associated with the government ICT processes.

Its success will hinge on the ability of Government, the private sector and the community to work together towards the common goals. It will also require decision makers to be open to emerging solutions and trends that will inevitably arise throughout its implementation.

I have no doubt that with this Strategy we have embarked on a transformation to bring better services to citizens through a better way of governing.

I look forward to working with you on our challenge ahead.



The Hon Greg Pearce MLC

Minister for Finance and Services

Minister for the Illawarra

FOREWORD FROM THE GOVERNMENT CHIEF INFORMATION OFFICER

Information and communications technology is an everyday tool for almost all our transactions and information needs. Australia has one of the highest take up rates of new devices in the world, including computers, smart phones, tablets and related applications. As a community we are increasingly using cloud-sourced services and software to work, to connect with each other and for recreation.

These technologies already allow for innovative approaches to government service delivery and community and industry engagement. However, despite pockets of best practice, the NSW Government has generally been slow to adopt new technologies to improve the way it does business.

Governments are generally conservative in their approach to social media, cloud computing and mobile device developments. While the community and businesses routinely use these services, government is yet to take full advantage of them.

There are significant opportunities now to start moving to cloud-based services and expanding the Government's use of virtualisation technology. The *Infrastructure and Managed Services Plan*, a key element of the *NSW Government ICT Strategy 2012*, sets out a roadmap for the NSW Government to adopt a service orientation to ICT infrastructure. This will drive cost efficiencies and free up resources to be targeted at new and better services for citizens and for business.

This Strategy will support the public sector to drive better service delivery, greater transparency and better value from investment in ICT. It will support agencies to do business in a way that is best practice and meets community expectations.

The Strategy complements the NSW Government's *Digital Economy Industry Action Plan*, which aims to build a dynamic and strong digital economy in NSW to drive economic growth and create new opportunities for Australian IT businesses to export innovation overseas.

The establishment of the NSW Government's ICT Board provides for the first time an opportunity to maintain a whole of government strategic approach to ICT investment. By working closely with the industry-based ICT Advisory Panel, Government will be able to leverage the latest thinking and experience from the private sector.

The *NSW Government ICT Strategy 2012* sets out the first steps in bringing the NSW Government up to date in how it uses ICT in order to enable the public sector to deliver better services to the people of NSW.

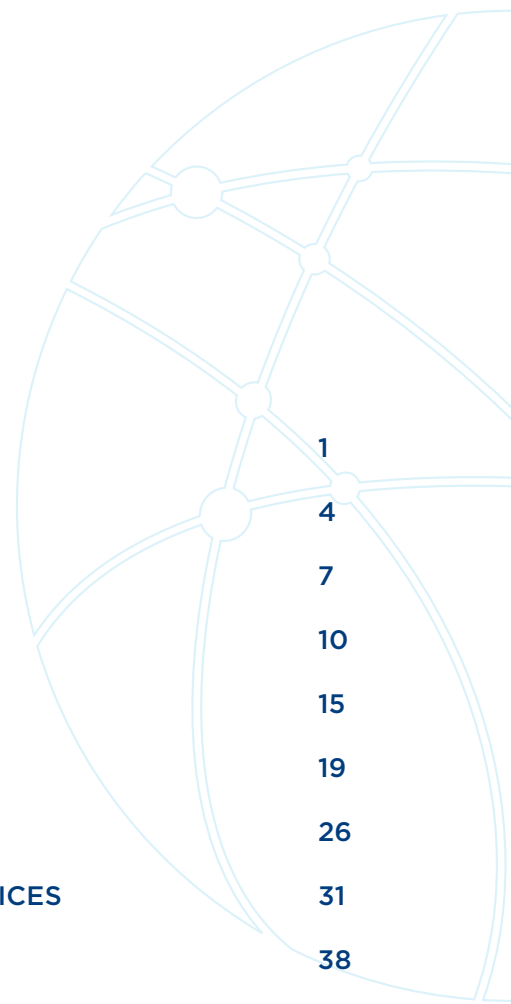


Michael Coutts-Trotter

Director-General
Department of Finance and Services
Government Chief Information Officer

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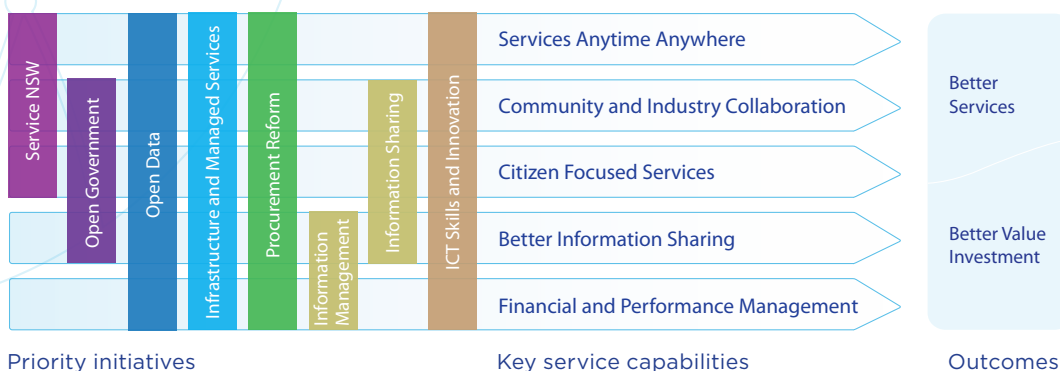
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EXECUTIVE SUMMARY

Vision: The NSW Government will be a leader in the use of ICT to transform government service delivery, make it easier to do business with Government, and build sustainable public sector productivity to the benefit of the entire State

The *NSW Government ICT Strategy 2012* outlines new approaches to infrastructure and managed services and ICT procurement, the establishment of Service NSW and the recommendations of five service capability working groups. Each working group was tasked with identifying the first set of priority actions to support improvement in five key service capability areas.



The actions identified through this process form the basis of a number of initiatives that will enable and support the government to deliver better services through ICT and to achieve better value from ICT investment:

- **Service NSW** – a new service culture that is responsive to community needs will improve the way we interact and partner with citizens, businesses and non-government organisations to improve services and make it easier to do business with government.

Key actions:

- o Implementation of the first tranche of Service NSW – 12 months.

- **Open Government** – a fresh approach to engaging with the public and industry through online and social media technologies will enable Government to enhance transparency and accountability, and to deliver better, more targeted services to the community.

Key actions:

- o Implement a whole of government approach to the use of social media for improved consultation and community engagement – 6-12 months.
- o Make Government information more accessible on publications.nsw.gov.au and through best practice website design – 6 months and ongoing.

- **Open Data** - making government data available to industry and the community will stimulate the development of innovative approaches to service delivery and new tools for interacting with government anytime anywhere.

Key actions:

- o Prioritise key government datasets, in consultation with government, industry and the research community, for public release – 9-12 months and ongoing.
 - o Implement an Open Access Licensing Framework across NSW – 18 months and ongoing.
- **Infrastructure and Managed Services** – taking advantage of virtualisation, sourcing as a service and cloud technologies will improve the Government's ICT infrastructure platforms to provide more agile, better and more efficient services.

Key actions:

- o Develop a Service Catalogue in consultation across the sector and with industry to transition the NSW Government to a service orientation – 9-12 months and ongoing.
 - o Establish policy frameworks to transition to cloud-based services – 12 months.
- **Procurement Reform** – a new approach to ICT procurement will enable more effective early engagement with the industry, and secure better value from the Government's \$2 billion annual ICT expenditure.

Key actions:


- o Expand the role of the ICT Board to include management of ICT procurement – 9-12 months.
 - o Trial new approaches to early industry engagement in procurement – 3-12 months.
- **Managing Information for Better Services** - setting a framework of common information standards and approaches across government will support secure reuse of information and data for better services, improved performance management, and a more productive public sector.

Key actions:

- o Establish a common approach to information management and standards across government – 12-18 months.
 - o Implement an integrated approach to performance and management information – 6-9 months.
- **Sharing Information Assets** – better use of information both within government and with industry will enhance cross-agency service delivery and co-production with the non-government sector to better meet community needs.

Key actions:

- o Develop a directory of key information assets that can be shared across agencies – 12-18 months.
- o Ensure the security of information held by government through a new approach to electronic information security – 1 December 2013.

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- **ICT Skills and Innovation** – building the right skills in our people and working closely with industry and the research sector will ensure that the public sector will be well placed to develop ICT-enabled solutions to service delivery challenges.

Key actions:

- o Enhance the NSW Public Sector Capability Framework to incorporate ICT skills and knowledge – 12 months.
- o Partner with the industry and research sectors to leverage best practice use of ICT – immediate and ongoing.

This Strategy outlines the actions, key milestones, and responsible agencies that will deliver on these priorities.

Driving the delivery of the Strategy

Delivering on the objectives of better value ICT investment and better services will require the ICT Board to maintain a high-level strategic oversight role in ICT investment and performance across government, set whole of government policy requirements for ICT investment and procurement, and monitor progress and outcomes of strategic projects.

The Board reports directly to the Minister for Finance and Services. The Board will take a whole of government view of ICT investment which will enable it to promote collaboration, reduce duplication, share investments and reduce costs across government.

Working with industry

The public sector can learn from industry and research sector expertise both in ICT investment and its use in service delivery. In some instances the public sector is commencing implementation of technologies and systems in areas that are common in the business and research sectors. We can learn from these experiences and collaborate on best practice solutions.

The ICT Advisory Panel, comprising senior ICT business and research leaders, has provided an invaluable perspective to Government during the development of the Strategic Framework and this Strategy. The Government will continue to work with the Advisory Panel as a source of expertise, and this will be the first step in a continuing dialogue with our industry stakeholders.

Many aspects of the Strategy will rely on industry participation. The Government will engage with industry on our performance in implementing a new approach to public sector ICT. A Strategic ICT Ministerial Forum, to be held later this year, will bring together government, industry and the research sector to review progress in implementing the Strategy, and identify new priorities and directions, including where business is well placed to assist.

INTRODUCTION

The NSW Government recognises that there is considerable scope for improvement in the way the public sector invests in and uses ICT to deliver services to NSW citizens. For this reason, Directors-General and other leaders from across the public sector were asked their views on how ICT could assist in improving the way Government does business. Overall there were two key responses. Government needs to derive better value from its \$2 billion annual investment, and ICT should be leveraged more strongly to drive better service delivery outcomes.

There was a shared view across Government that the NSW public sector is generally not getting best value for money, and that ICT is not being used to its full potential to drive the services the industry and the public expect.

The NSW public sector needs to reduce duplication and eliminate its fragmented and inconsistent approach to ICT. Agencies need to share information, work with the community and industry, and provide services to citizens in the platforms that they use in their everyday lives.

These views, and those of industry, informed the 2011 *NSW Government ICT Strategic Framework*, which outlined a clear direction for coordinating and improving our approach to ICT through a whole of government strategy.

The recently released Commission of Audit *Interim Report: Public Sector Management* mirrors the views of Directors-General on how the public sector needs to do business more effectively. The report makes it clear that Government performance and reporting is severely restricted by outdated and incompatible systems within agencies and inconsistent approaches to information management.

These issues are common across the NSW public sector. For example, there are numerous separate implementations of enterprise resource planning software across Government, all requiring different levels of vendor support; and more than 600 Government websites using a wide range of different content management systems.

In the past, there has been limited progress in coordinating services from different agencies and using ICT to make this happen. There are different approaches across Government to the way we use social media, how we make our data available and how we manage and store information. This restricts our ability to work together to develop innovative and cross-agency approaches to problem solving and service delivery.

There are a number of Government agencies that are already using technology in clever ways to deliver high quality services. We can learn from their experience and ensure that it is shared across Government.

ICT decision making should be led by departmental service delivery priorities, however there is an opportunity to work together at the whole of government level to improve performance. A new whole of government approach will take full advantage of opportunities for improved service delivery, improved productivity in government, and more coordinated and efficient investment in ICT.

The *NSW Government ICT Strategy 2012* places citizen services at the centre of decision making. It maps out a plan that ensures NSW services are delivered in an efficient, cost effective way that for the end user, the citizen, is simple and easy to understand.

The NSW Government ICT Strategic Framework


On 22 November 2011 the NSW Government released the *Draft NSW Government ICT Strategic Framework*.

The Strategic Framework sets out a clear focus on using ICT for better service delivery, and achieving better value for our ICT investment. It outlines a new, whole of government approach to ICT planning to maximise the support and coordination necessary to share expertise and fully capitalise on opportunities arising from a changing ICT environment.



The Strategic Framework recognises that the outcomes of better services and better value from ICT will be driven by improved performance in priority service capabilities. There are a number of areas within Government where agencies are at the forefront of using ICT to improve service delivery, and these areas of expertise should be leveraged across the public sector. The five priority service capabilities are summarised below:

- **Providing services anytime anywhere** – citizens and businesses expect convenient and real-time services anywhere and anytime, including via mobile devices. Further, providing convenient and secure two-way communication to support public sector workers in the field can free them from desk duties, reduce overheads, and increase the effectiveness of front line services.
- **Community and industry collaboration** – the internet continues to develop new ways for government to interact with the community and industry in policy development, priority setting and service improvement. This provides a significant opportunity for improved outcomes and increased satisfaction with government services.
- **Citizen-focused services** – emerging technologies allow for the development of new and better services that deliver the ‘whole service’ from the citizen’s perspective, rather than a ‘government silo’ perspective. This makes accessing government services easier for citizens and businesses, reducing red tape, and increasing satisfaction.

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- **Better information sharing** – improving the ability of government to efficiently share and analyse information between departments and with others will improve decision making, maximise the value of government information assets and will provide opportunities for the delivery of new and better services. It will be essential that such sharing is conducted in a secure manner to protect privacy and commercial confidentiality.
 - **Financial and performance management** – public sector managers need up to date and consistent information about the financial, service and business performance of their agencies to drive improved decision making, and to ensure effective and efficient service delivery.

A series of working groups, drawing on expertise from across government, industry and the research sector, were established to identify and prioritise the actions required to improve capability in these key areas. The working groups received advice from ICT Industry Advisory Panel members who provided an essential industry and research sector perspective, and invaluable insights into private and public sector ICT projects.

The Framework was well received by the ICT community, prompting thoughtful comments and submissions that were provided to the working groups for consideration. Much of this feedback is now reflected in the *NSW Government ICT Strategy 2012*.

Working groups on infrastructure and managed services, technical standards and information security have also been established to drive improved Government performance and common approaches to the way Government uses and invests in ICT.

NSW2021

NSW2021 is the Government's 10-year plan to guide policy and budget decision making and deliver on community priorities. It sets long-term goals and measurable targets, and outlines actions that will help achieve these goals. These reflect the Government's commitment to whole of state growth and delivery, and to improve opportunities and quality of life for people in regional and metropolitan areas.

This Strategy reflects the *NSW2021* commitment to Open Government, including expanding the use of the Publications NSW and Have Your Say websites as community resources for information and providing feedback on Government services and policies. Restoring accountability will be enabled by the Open Government priority outlined in this document.

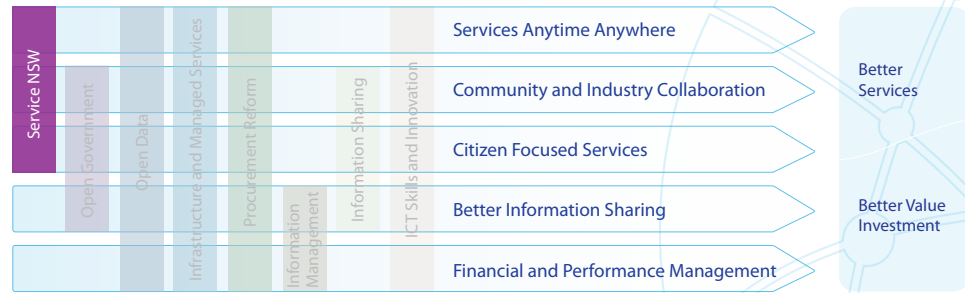
Service NSW is the *NSW2021* commitment to establish a citizen-focused approach to information and service delivery. ICT will be the key driver for bringing together a range of services that can be accessed through one call, one website visit or one visit to a Government one-stop shop.

More broadly, this Strategy will drive the *NSW2021* commitments in relation to improved service delivery by driving innovation across the public sector.

SERVICE NSW



SERVICE NSW



NSW2021: the Government has committed to establish Service NSW to provide a single 24/7 NSW government phone number, a customer friendly government web portal, one-stop-shops, and mobile applications to provide real time information to customers.

NSW2021: the Government has committed to improving the efficiency and appeal of the public transport system, including by providing more real-time information and higher standards of customer service through mobile apps, trip planning tools, and integrated electronic ticketing.

Service NSW will provide tailored services to NSW citizens.

We will move from an agency-centric service delivery model to one that matches community needs and expectations.

Citizens will be able to access information from the one website, the one location, the one phone number.

Building service capability

Service NSW is a comprehensive service delivery model which supports the Citizen-focused, Community and Industry Collaboration and Services Anytime Anywhere service capabilities.

- **Services Anytime Anywhere** – the development of mobile applications will enable high quality services and interaction with government to be delivered irrespective of the time of day or the location of the user.
- **Community and Industry Collaboration** – Service NSW will be refreshed on a regular basis as Government listens to and adapts to community and industry expectations about the services we provide.
- **Citizen-focused Services** – service delivery will be designed in line with the business and community expectations. Information will be provided by function as opposed to the limited agency-centric model. For example, information will be provided from a range of agencies around important life events such as the birth of a child, starting school, getting married and retirement.

A number of jurisdictions have already demonstrated that government information and services do not have to be delivered from the traditional agency-centric model. New York City and Singapore are two examples where governments have transformed service delivery to match customer needs and provide a central portal for access to government. Services are delivered in an integrated way to match customer preferences.

In the same way, the NSW Government's *Simpler Government Services Plan objectives*, outlined in *NSW2021*, make a commitment to simplify customer access to government services and to design services to meet customer needs. ICT is increasingly becoming the key enabler in making transactions with government simpler by providing customers with the ability to interact at a time and place of their choice.

The State Plan specifically identifies the establishment of Service NSW to provide:

- a multi-channel delivery model, comprised of one-stop-shops;
- 24/7 phone services;
- a customer friendly web portal; and
- mobile applications.

The initial bundle of services will include transactional services carried out for and on behalf of local government, government business enterprises and Commonwealth agencies.

Service NSW will provide approximately 150 government services from 16 organisations including CityRail, Roads and Maritime Services, NSW Fair Trading, Sydney Water, energy providers, Commonwealth Government agencies and local councils.

It will leverage technology already being used by government including OneGov, an application that allows multiple agencies to interface through a single portal. Service NSW also uses DRIVES and the Government Licensing System (GLS), the applications that manage the transactions.

One-stop-shops

It is proposed that seventeen one-stop-shops will be operational from early 2013, with more coming online each year. A five year program will see one-stop-shops delivered throughout NSW.

The Government will also explore the delivery of shop front services by third parties and the use of information kiosks to provide services to customers where the government does not have a shop-front presence.

Single 24/7 phone service

It is proposed that a number of existing government call centre 'hubs' be linked to deliver a 24/7 Government phone service.

Customer friendly web portal

The NSW Government will build a new web portal, accessed through nsw.gov.au. The portal will bring local, state and Commonwealth government transactions and information together into 'life events' such as starting a family, commencing school, returning to work and retirement.

Mobile applications

Mobile applications provide customers with real-time information about government services as they need them. An excellent example of this is the Transport for NSW 131 500 app, which was produced by partnering with a private firm at little or no cost to the department. The Government's new approach to Open Data will facilitate the development of additional third party applications.

Since its August 2011 launch the Department of Education and Communities School A to Z free app has been downloaded by more than 40,000 users in Australia and overseas, including China, Indonesia, the US and the UK.

The app was developed as part of the School A to Z online school community, a resource that includes a website and social media channels that aim to help parents support their child's learning.



Service NSW

Actions:

Prioritisation of the development of the business case, including the Technology Roadmap, for the establishment of Service NSW

Implementation of the first tranche of Service NSW

Expansion of service offerings, locations and channels

Delivering:

Q3 2012

Q1 2013

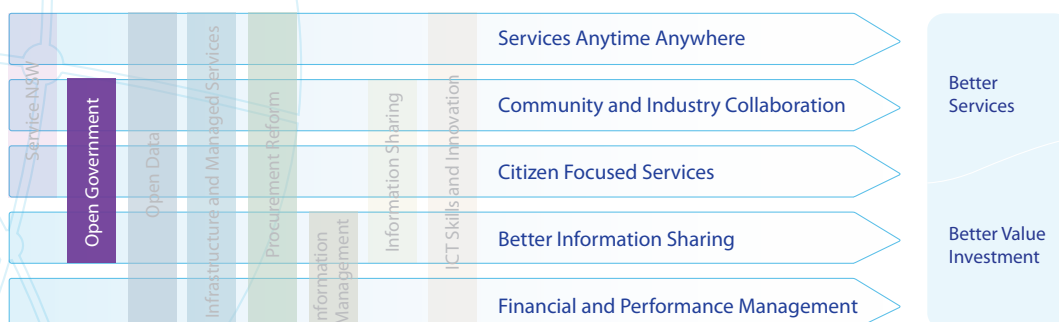
Q1 2013 and ongoing

Responsibility: Department of Premier and Cabinet, Roads and Maritime Services, NSW Fair Trading, Transport for NSW

OPEN GOVERNMENT



OPEN GOVERNMENT



Building service capability

Making a commitment to Open Government will directly support the Community and Industry Collaboration, Citizen-focused Services and Better Information Sharing service capabilities outlined in the ICT Strategic Framework:

- **Community and Industry Collaboration** - Open Government will enable close engagement with the community and industry on policy development and service delivery.
- **Citizen-focused Services** - Open Government will enable government to deliver services in line with community expectations.
- **Better Information Sharing** - Open Government will enable government to share information to be more transparent, accountable and collaborative.

NSW2021: The government has committed to develop an 'Open Government' plan to increase community access to appropriate government information and to expand the Publications NSW website to include access to all agency information published as 'open access' under the GIPA Act.

As outlined in *NSW2021*, the NSW Government is committed to Open Government. This means that the Government will adopt as guiding principles:

- Transparent decision making and practices
- Close engagement with the public on policy development
- Collaboration with communities and industry on service delivery and project implementation.

These principles will increase satisfaction with government services, restore accountability and build trust.

The *Government Information (Public Access) Act 2009 (GIPA)* embodies the principles of open government by promoting the release of government information. The Act recognises that a significant amount of government information can, and should, be released proactively. Agencies are required to review each year the kinds of information that should be made available to the public. The NSW Information Commissioner also has a crucial role in promoting open government in NSW.

Government will make it easier for the community and business to provide feedback on performance and to have input into the policy process. Citizens increasingly choose to connect with government online and Government will facilitate online communication and consultation.

NSW2021: Actions to enhance community consultation include a central government website where communities can have their say on NSW Government plans to improve services and quality of life.



Online consultation will better enable the Government to listen and respond to feedback from citizens, customers, and suppliers about new ways to provide high quality services.

The NSW Government will take greater advantage of the online environment to make providing input to policy development and service delivery easier. The *Have Your Say* website invites members of the public to contribute ideas and express views on policy initiatives. Recent forums have been held on *NSW2021*, the *Review of NSW Government Procurement*, the *NSW Transport Masterplan*, and the *NSW Government ICT Strategic Framework*.

The Government's commitment to transparency and collaboration will be demonstrated by its use of online tools to enhance consultation.

This commitment will be communicated across Government and will require agencies to conduct business consistent with these principles:

The NSW Government is committed to being:

- *Open* in our work for the people of NSW.
- *Open* to citizen participation in the policy process.
- *Open* to collaboration on how we do business.

The NSW Government will enhance:

- *Online* access to government services to make them available anywhere, anytime.
- *Online* communications, including social networks, for internal and public dialogue.
- *Online* mechanisms for community and industry consultation and collaboration on innovative solutions.

This strategy outlines actions to get started on an open, online approach to quality services through better investment in information and communications technology.

Each cluster will report to the ICT Board with a plan to:

- Identify priority datasets for publication at data.nsw.gov.au.
- Increase open access information available at publications.nsw.gov.au.
- Facilitate public participation in the policy development process.
- Make greater use of social media to communicate with staff, customers and industry.
- Increase online access to government services.
- Collaborate with community, industry and research partners to co-design service solutions.

Our progress will be reported publicly with stories of best practice that showcase the NSW Government's commitment to open, online government.

The following initiatives will contribute to the Open Government priority.

Social Media – whole of government approach

Social media networking tools play a key role in modern communications. While there are pockets of best practice in key agencies, Government has generally been slow to embrace these online tools. In these days of immediate, location independent telecommunications it is unrealistic to restrict public sector communications to traditional channels.

Public sector staff will be empowered to use social media tools where it can assist in improving service delivery. Services will be mobile, agile and able to respond quickly to emerging issues.

Social media policy

Actions:

Implement a whole of government policy that supports the use of social media for enhanced public engagement and service delivery

Make reference guidelines available to agencies for public sector employees use of social media

Delivery:

Q4 2012

Q4 2012

Responsibility:

Department of Premier and Cabinet, Department of Finance and Services, Department of Education and Communities

Making government information more accessible at Publications NSW

In *NSW2021* the NSW Government committed to expanding the *Publications NSW* website to include access to all agency information published as 'open access' under GIPA.

Publications NSW is a vital community resource that needs to be reinvigorated and expanded. It provides a repository for government reports, statements, information, policies and applications based on government data. This website will become the first port of call for community and business access to up to date government information as it becomes available.

NSW2021: We want to improve proactive disclosure of information, make it easier to access information online and make real-time information available when it is needed.

Providing people with access to information leads to improved community decision making and greater trust in public institutions.

Publications NSW

Actions:

Guidance on compliance with GIPA requirements and voluntary disclosure of government information

Monitoring and reporting on GIPA requirements and proactive disclosure

Expand and promote Publications NSW as the default and easily searchable repository for published Government information, reports, policies and other announcements

Delivery:

Q4 2012 and ongoing

Q4 2012 and ongoing

Q4 2012 and ongoing

Responsibility:

Department of Attorney General and Justice, the Office of the Information Commissioner, Department of Finance and Services



Best practice website design

Increasingly citizens are doing business with government online. Websites need to be presented so that government information is useable, accessible and focused on the citizen, not the agency responsible for providing the information. Electronic content needs to be appropriately tailored for computer, smartphone and tablet interfaces, with a strong focus on user experience so that information is available in a way that suits the customer.

Businesses and citizens should be able to update details online and conduct as many of their transactions as possible through government websites. Agencies will have a renewed focus on enabling electronic updating of business details, electronic reporting and online licensing including licence renewals. Agencies will make available online their policies, legislation and explanatory information.

This will not replace traditional modes of engagement with customers, but will provide a source of information that can be accessed at any time and from any location.

Best practice website design

Actions:

Develop best practice website, smartphone and tablet design guidelines

NSW agencies to investigate making templates and reporting forms available online and accepting electronic submission of updates and reports

NSW agencies to investigate online renewal of all Government licences, including the updating of customer and business details

Delivery:

Q1 2013

Q1 2013

Q1 2013

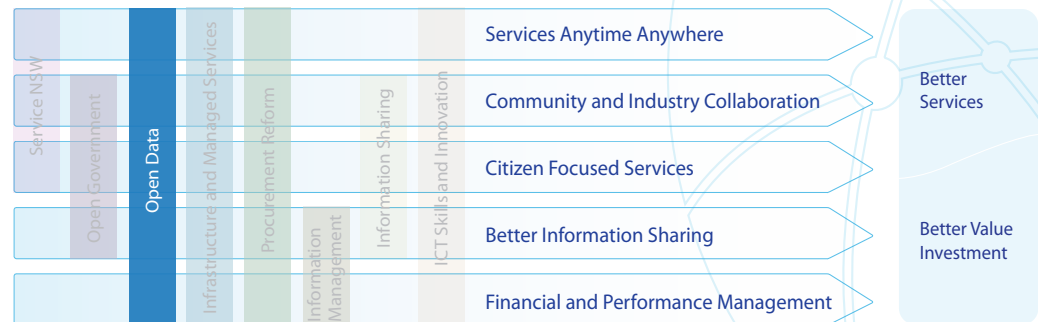
Responsibility:

Department of Premier and Cabinet, Department of Finance and Services. The Office of the Information Commissioner will be consulted on the implementation of these initiatives

OPEN DATA



OPEN DATA



NSW2021: Actions to improve services include increasing the number of mobile phone applications that allow people to access government data, for example, Live Traffic NSW, SMS bus services, Police eyewatch and real-time hospital emergency information.

Another example is a new National Parks website to provide real-time information, online interactive maps, and a new online booking system for accommodation, camping and annual passes for park visitors.

Building service capability

Improved information management will directly support the Community and Industry Collaboration, Citizen-focused Services, Better Information Sharing and Financial and Performance Management service capabilities outlined in the ICT Strategic Framework.

- **Community and Industry Collaboration** – working closely with the community and industry drives best practice and innovation. We want to learn from the community about how Government is performing and increase satisfaction with services.
- **Citizen-focused Services** – sharing information with the community allows citizens to tell government how they want to receive services and information.
- **Better Information Sharing** – managing our information better will ensure it is consistent and can be shared across government and industry for improved service delivery outcomes.
- **Financial and Performance Management** – agencies will be able to share financial and performance information with central agencies to build a comprehensive picture of how government is performing.

There is significant potential to stimulate innovative solutions to service delivery by making NSW Government data available to the public and industry.

Making data more accessible is a key component of the NSW Open Government commitment, which also complements the NSW Government's *Digital Economy Industry Action Plan*.

The *Digital Economy Industry Action Plan* will focus on sectors that will support long term productivity and innovation growth as well as export opportunities for digital content and applications, information services, smart networks and intelligent technologies.

The following initiatives will contribute to the Open Data priority.

Accessing and managing government data

data.nsw.gov.au is the online catalogue of NSW Government datasets. One of the first such portals in the world, data.nsw.gov.au will be further enhanced to make more government data available in machine readable formats and through visualisations, web tools and mapping services.

Government data that is most often requested by members of the public or industry, or is identified by agencies as best aligned to service delivery outcomes, will be nominated by each department for priority release. These high value datasets will be cleaned and published under a permissive licence.

Data collected and managed by agencies should be reliable and, where appropriate, interoperable. Currently, data standards in NSW are not mandated. There is a need to review relevant Australian and international data standards, quality assurance and control process and ensure these measures are consistently implemented to ensure best practices.

ICT Strategic Framework:

We will build on the successful data.nsw initiative to encourage a more consistent approach to making government information and data available to the apps development community.

This approach will enable the innovative use and reuse of government data and the development of applications to deliver current services in new ways and to develop new services.

Accessing and managing government data

Actions:

Expand and enhance data.nsw.gov.au

Identify and publish syndicated feeds of high demand real-time data

Prioritise key government datasets for standardisation in consultation with government, industry and the research community

Define and agree common data standards

Delivery:

Q1 2013

Q3 2013

Q1 2013
and ongoing

Commencing in
Q1 2013 with
completion by 2015

Responsibility: Department of Finance and Services

Information and data licensing

The NSW Government owns the copyright for material it publishes. The increasing demand for public information requires a licensing framework that encourages access and reuse, while also identifying and protecting personal and other confidential information, third party copyrights and other intellectual property rights.

A consistent open information licensing model for all NSW Government agencies will provide clarity to the community and to industry on how government data can be used. An essential aspect of the model will be to identify material that should be excluded from the open licences, and ensure that such material is appropriately protected.



Information and data licensing

Actions:

Develop an open access licensing framework in consultation with an across-government working group

Implement an open access licensing framework across government

Delivery:

Commencing immediately with completion by Q2 2013

Commencing in Q3 2013 with completion by 2015

Responsibility:

Department of Finance and Services, Department of Attorney General and Justice, Department of Trade and Investment

apps4nsw

Key government data sets will be prioritised for standardisation.

This will facilitate public sector and industry access to a range of high quality government information.

Government will work closely with industry to develop smart applications to enable the delivery of services and information at any time and from any location.

The community will benefit from innovative approaches to service delivery using real time government information.

The public expects that services and information are available on mobile devices for access from any location and at any time. The NSW Government will position itself as a leader in mobile service delivery through the extension of the apps4nsw program. In *NSW2021* Government identified the need for new mobile apps that allow people to access public services, such as Live Traffic NSW, an SMS bus service, Police eyewatch and real-time hospital emergency information.

apps4nsw events challenge software developers to create new web and mobile applications using government data. These events offer opportunities for NSW Government employees, industry representatives and citizen developers to come together to build innovative service delivery solutions.

apps4nsw

Actions:

Host two apps4nsw events to leverage datasets

Investigate opportunities to extend apps4nsw to include cross-jurisdictional datasets and collaboration

Delivery:

Q2 2013

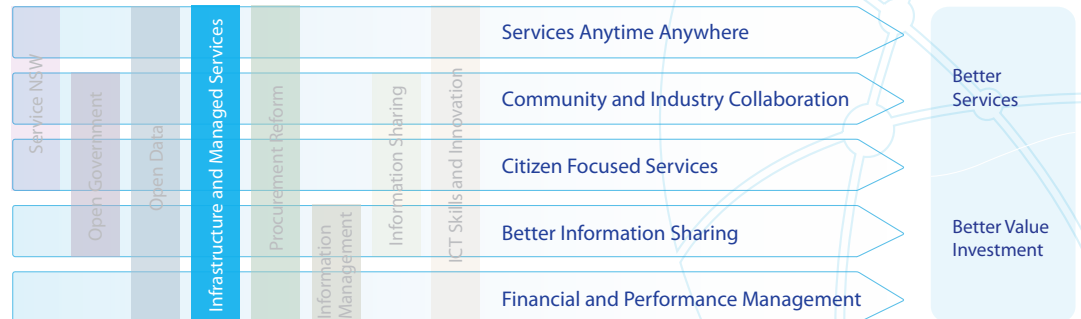
Q4 2013

Responsibility: Department of Finance and Services

INFRASTRUCTURE AND MANAGED SERVICES



INFRASTRUCTURE AND MANAGED SERVICES



Building service capability

The implementation of the Infrastructure and Managed Services Plan will enable improvement in all five service capabilities.

- **Services Anytime Anywhere** – we will be able to respond quickly and flexibly to new opportunities to provide mobile service delivery channels.
- **Community and Industry Collaboration** – industry will play a key role in providing Government with the most up to date software and hardware solutions on an as needed basis.
- **Citizen-focused Services** – a move to a service orientation for ICT infrastructure will allow agencies to focus on business needs and the services that directly benefit the citizen.
- **Better Information Sharing** – implementing systems that are common to multiple agencies will facilitate information sharing across Government.
- **Financial and Performance Management** – common platforms and systems will enable consistent and targeted performance management and reporting.

The NSW Government's *Infrastructure and Managed Services Plan* provides a comprehensive roadmap for transforming the way the public sector uses ICT. NSW Government agencies currently manage their computing infrastructure in a variety of ways. Some manage their own facilities and operate their own equipment. Some use industry service providers to manage their equipment either in their own agency facilities, or hosted within the service provider's facility.

These arrangements result in variable ICT service quality, increased costs and a diminished ability to capitalise on emerging trends such as cloud computing.

Improving service quality, particularly availability and reliability, will become increasingly important as Government delivers more services through electronic means and becomes more dependent on ICT. Service quality is critical when Government services are made available online to the community 24 hours a day, 7 days a week.



There is an urgent need to directly address these challenges by:

- Improving ICT infrastructure platforms so they can deliver better and simpler Government services.
- Improving the effectiveness of ICT expenditure.
- Improving the agility of ICT infrastructure platforms so they can respond more rapidly to community needs.

The *Infrastructure and Managed Services Plan* will take advantage of two major industry trends driven by the combined forces of technology commodification and the adoption of web services by consumers:

- A move to a service orientation by both vendors and buyers.
- The deployment of cloud technologies into mainstream business.

Moving to a service orientation provides agencies with more options and increased flexibility to find solutions that meet their business needs. It will shift the focus of ICT from asset ownership and operation to activities that enhance customer service.

Cloud technologies offer opportunities to reduce cost by leveraging small portions of a larger infrastructure base on an 'on demand' basis. Cloud technologies enhance agencies' ability to respond quickly to emerging needs, such as the rapid implementation of virtual machines for services such as email or business reporting.

These services must be made available to agencies in a way that is both accessible and meaningful to their businesses:

- **Infrastructure-as-a-service (IaaS)** - a utility computing data centre with on demand resources such as servers. Agencies could use IaaS to access virtual machines to run their applications.
- **Platform-as-a-service (PaaS)** - a hosted application environment for building and deploying applications that might be delivered from the cloud. Agencies could use PaaS for application development projects and application delivery. It could also be used for the delivery of a virtual desktop to end users.
- **Software-as-a-service (SaaS)** - direct access to standard applications that are typically made available via a web browser. Agencies could use SaaS to deliver standard application services such as email and word processing, or more comprehensive solutions such as finance systems.

The Service Catalogue

A service orientation – where agencies procure ICT as a service rather than buying and operating ICT assets directly themselves – underpins the use of cloud technologies.

Developing a service catalogue that is based on agency needs is an essential step in embedding a service orientation into everyday ICT activities.

The service catalogue is a fundamental element of an effective and efficient ICT supply chain. The catalogue defines the essential characteristics of each service, focusing on the nature and scope of the service, its delivery quality, its cost, the vendor and contractual considerations. These characteristics allow agencies to select a service that best meets their needs. The table below illustrates potential elements of a service catalogue and how they might be defined.

Service	Essential characteristics										
Email	Relevant Government policy	Nature, scope and limitations of service	Metrics and application performance measurement regime	Charging basis and transaction costs	Service options and extensions	Activation process	NSW Government responsible officer (contract definition)	Originating provider	Client obligations	Contractual considerations	Current and historical vendor performance
Office productivity tools											
Business application											
Desktop device											
IaaS											
PaaS											
SaaS											

Delivering services through a whole of government service catalogue will leverage NSW Government purchasing power to secure the most effective pricing, and support consistent service delivery across Government. It will allow for more effective benchmarking of performance across the sector.

While agencies will continue to procure the ICT services and products that best meet their own service delivery objectives, the catalogue will give agencies confidence that ICT services provided will meet the requirements of government, and move agencies toward more common approaches, technologies and systems.

Service catalogue

Actions:

Build a service catalogue in collaboration with industry and other agencies

Develop and implement policies to support the service catalogue in collaboration with industry and other agencies

Delivery:

Q4 2012 and ongoing

Q2 2013

Responsibility: Department of Finance and Services

Virtualisation and consolidation

Virtualisation allows many small physical servers to be replaced by one larger device in order to make more efficient use of costly hardware resources.

The provision of physical ICT infrastructure is typically a bottleneck in most ICT departments and virtualisation fundamentally changes the way machine resources can be made available. New virtual machines can be provisioned in minutes not months. When an application needs more machine resources, a virtual machine can be immediately re-configured and this agility frees up resources to focus on service delivery.

Virtual consolidation promises three important benefits: low risk cost savings, enhanced provisioning agility and a path to a future trusted Government cloud. Some agencies have already begun this transformation of their ICT infrastructure and there are significant opportunities to further virtualise agency servers.

For example, on average the Department of Finance and Services has eight virtual machines on each physical server and the Department of Education and Communities has an average of four. Overall the NSW Government as a whole has an average of 1.4 virtual machines on each physical server while large Australian enterprises are running an average of over 20. This suggests that there are substantial opportunities for Government to increase virtualisation for much greater financial benefit.

Agencies that are currently deploying virtualisation are working to a variety of standards. The service catalogue will make it easy for agencies to virtualise to consistent standards, facilitating a future move to cloud services.

As a first step, Government will make software licences to virtualisation tools available to agencies that can demonstrate a clear business case. This will be supported by straight forward principles to ensure a consistent approach.

Virtualisation and consolidation

Actions:

Agencies to develop virtualisation plans

Prioritise a business case for making virtualisation licences available to agencies on the basis of business need

Update Service Catalogue items relating to provision of virtualised machines

Execute virtualisation plans

Delivery:

Q4 2012

Q4 2012

Q1 2013

Q4 2012
and ongoing

Responsibility: Department of Finance and Services and all agencies





Cloud

Cloud computing is a model of service provision that enables simple, convenient and on demand access to a shared pool of computing resources. These resources are configured by the service provider to maximise economies of scale.

Cloud computing is increasingly being adopted by a number of Governments, including in the United Kingdom and the United States. Cloud services are in common use across industry and it is timely for the NSW Government to capture the benefits of a system where IT services can be procured on demand.

Cloud technologies offer Government the opportunity of significant cost savings through reduced capital expenditure and adoption of a pay per use model, and the opportunity to provide highly resilient and scalable services to the general public. Some agencies have already begun taking advantage of cloud computing. For example, the Department of Education and Communities provides student email through a software-as-a-service solution.

Cloud service models can be deployed through a private or a public cloud, or a combination of both. A private cloud is one in which the supporting physical infrastructure is provisioned for exclusive use by a single organisation. It may be owned, managed, and operated by this organisation or a third party industry provider. The physical infrastructure may exist on or off the organisation's premises.

A public cloud is provisioned for open use by the general public or any enterprise. It is typically owned, managed, and operated by an ICT industry service provider. The underlying physical infrastructure is housed on the premises of the provider, which could be located anywhere in the world.

While the public cloud presents clear advantages for NSW Government in that it offers cloud computing at the lowest possible cost, the private cloud environment provides more flexibility, customisation to the needs of government, and better control over data storage, security frameworks and sovereignty issues.

The initial path for the NSW Government is to establish a trusted Government cloud that is private and made available to NSW Government agencies. This provides an ideal environment in which to prepare for possible migration to the public cloud as these service offerings mature.

The Government will undertake a comprehensive risk assessment in relation to the storage and maintenance of public sector information and records by a cloud provider. There will be some classifications of Government information that may be unsuitable for access through a cloud-based service.

The Government will commission an initial limited private cloud for agencies. This approach will fast-track the implementation of cloud technologies while allowing for policies and standards to be finalised.



Cloud

Actions:

Establish pilot private cloud offering

Development of the trusted Government private cloud

Migrate agency environments to trusted Government private cloud

Policy frameworks in place to support public cloud offerings through Service Catalogue

Delivery:

Q4 2012

Planning and development from Q2 2012 through Q2 2013

Commencing in Q2 2013 with completion by 2015

Q2 2013

Responsibility:

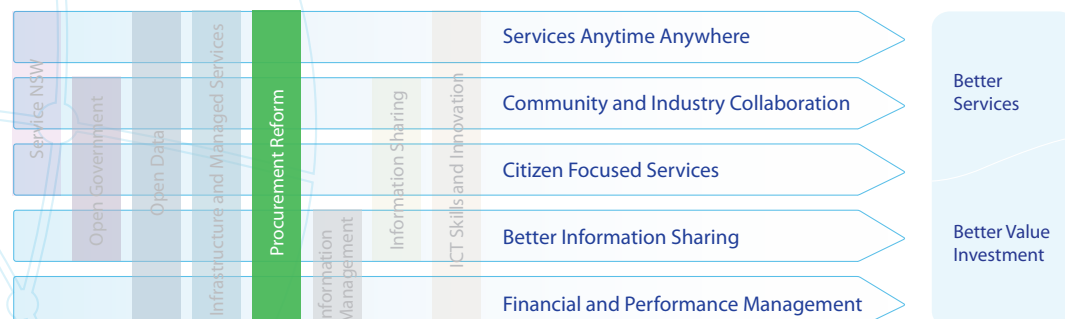
Department of Finance and Services in collaboration with all agencies



PROCUREMENT REFORM



PROCUREMENT REFORM



Building service capability

Procurement reform will enable improvement in all five service capabilities.

- **Services Anytime Anywhere** – sourcing the best technologies quickly to take advantage of emerging mobile technologies.
- **Community and Industry Collaboration** – Government will be well positioned to consult with industry and the research sector on how best to solve service delivery challenges.
- **Citizen-focused Services** – Government will be able to improve service delivery by redirecting resources formerly allocated to costly technology purchases and reallocating them to services that directly benefit the citizen.
- **Better Information Sharing** – Government will be able to acquire ICT based on principles of interoperability and shared expertise.
- **Financial and Performance Management** – the public sector will get better value for money and be able to target investment to where it is most needed.

With an annual total ICT expenditure of over \$2 billion, the NSW Government is a significant ICT consumer. A new and more flexible approach to ICT procurement will produce benefits for both the Government and industry.

In 2011, the Government initiated the *Review of Government Procurement* to fundamentally reform its procurement arrangements in order to make doing business with the NSW Government simpler, easier and more attractive.

The Government's new approach to procurement will:

- Allow for contemporary means of sourcing government goods and services.
- Bring the form and content of government contracts in line with modern practice.
- Expand the ways that small and medium enterprises can effectively gain opportunities to supply goods and services to the government.
- Introduce greater innovation into government procurement and in turn foster innovation and stimulate a more vibrant NSW economy.

While individual agencies will continue to have specialist ICT requirements, many ICT needs are common to all agencies. For this reason it is proposed that certain ICT categories should be managed centrally. This will enable Government to leverage the greatest purchasing power for the benefit of all agencies.

Concept Viability:

Technology industry association Intellect, based in the UK, provides a Concept Viability service to the public sector to test a concept, business need or proposed ICT solution at the earliest stage of development. A step designed to fit with traditional proof of concept or feasibility assessment.

Intellect draws on a range of expertise from their 800 member companies to provide an assessment of a proposal highlighting risks or issues and providing a market perspective.

This early engagement with industry aims to address the challenges of transforming policy ideas into the required outcomes and capturing the full opportunities from ICT-enabled solutions.

To ensure best practice procurement decisions, the ICT Procurement and Technical Standards Working Group will seek advice from technical and industry experts to find a balance between technology 'lock-in' and technology interoperability.

The key objectives of the working group are to:

- Develop the framework and supporting policies to enable agencies to readily procure standardised ICT Services.
- Review standard specifications on existing ICT contracts due for renewal, including making recommendations to improve the balance between whole of government aggregated procurement and an increased competitive environment.
- Provide advice on standards and standardisation as new procurement arrangements for IT hardware, software and telecommunications are developed and aligned with the ICT Strategy.
- Ensure that recommendations for standards and standardisation in ICT procurement effectively address business needs and requirements for service delivery.

However, agency-specific ICT procurement will continue to be conducted by individual agencies, consistent with whole of government standards.

Strengthened governance

The role of the ICT Board will be expanded to incorporate strong ICT procurement governance arrangements. This will ensure that the ICT policies and strategies endorsed by the Board are followed through with the right mix of procurement activity and contracts.

Early industry engagement

Government will engage closely with industry. By engaging early and outlining the specific business outcomes the Government is seeking to achieve, industry will have greater opportunity to develop innovative and targeted solutions.

For example, the 'invitation to respond' process used by the Commonwealth Government allows for close engagement in the development of creative solutions with several potential providers, while remaining a formal process that leads to a competitive tender. This process will inform how the NSW Government approaches industry engagement.

Early industry engagement will also allow small to medium enterprises (SMEs) a better opportunity to present solutions to Government. SMEs often have fewer resources to market their products and services, but are often well placed to develop innovative solutions.

Supporting the Infrastructure and Managed Services Plan

The Government's new approach to ICT procurement will complement the implementation of the *Infrastructure and Managed Services Plan*.

A key element of the Plan is the service catalogue, which will outline to agencies the ICT services supported by predefined supply contracts. An important outcome of the service catalogue is to reduce the organisational burden associated with procurement.

For this reason, the service catalogue must be easy to use by both agencies and suppliers. An important benefit for Government is that it supports a common and standards-based approach, and encourages agencies to adopt a service orientation and consider innovative solutions.

Maximising the utilisation of purchased assets and services

When an agency has no immediate or further use for an asset or service it has purchased, it should be possible for that asset or service to be made available for other agencies as required. This will demand a new approach to contracting with suppliers and a robust asset management capability to track the current status and usage of Government ICT assets.

Improving contracts and contract management

A new contract framework has already been negotiated with industry in the form of Procure IT version 3. This adopts a commercially realistic approach to contracting which includes vesting intellectual property in suppliers by default and appropriate insurance levels to encourage SMEs.

The benefits of a standard contract approach are that it reduces both time and cost for agencies by minimising the need for negotiations on each individual procurement action. To ensure that these benefits are realised, the Government will mandate the use of Procure IT version 3 across Government.

Contracts that operate over long periods limit the Government's ability to respond to price changes, delivery models and technology innovations. To address this challenge, a range of contract durations will be considered, with short duration contracts introduced to ICT procurement categories as appropriate.

It is also recognised that agencies can require long term contracts and partnerships with vendors and service providers to meet specific agency needs. The provision of managed services by industry will require new contract instruments so that Government can implement the Infrastructure and Managed Services Plan. This will require the development of contracts and schedules that address the pay-as-you-go consumption models of infrastructure-as-a-service, platform-as-a-service and software-as-a-service. To support this, new modules as part of the Procure IT contract suite should be developed in collaboration with industry through the Australian Information Industry Association.



Contractual changes will also be considered to allow SMEs to more easily participate in Government procurement processes and to reduce their legal and administrative burdens.

Government will also consider ways to improve its management of ICT contracts and suppliers, after they have been awarded. Better contract management will ensure the full benefits of the procurement process are achieved and sustained over the life of the contract, and that the risks and costs that may arise during the contract term are appropriately assessed and minimised.

Monitoring and managing supplier performance, and encouraging continuous improvement and innovation from the supply partnership are also crucial outcomes of effective contract management.

The NSW Auditor-General's Performance Audit report *Managing IT Services Contracts: Department of Finance and Services, NSW Ministry of Health, NSW Police Force* (2012) found significant opportunities to improve contract management procedures and capabilities across Government.

Building agency procurement capability, including contract and supplier management skills, is a key focus of the *Review of Government Procurement*.

Procurement reform

Actions:

- Expand the role of the ICT Board to include the governance of ICT procurement
- Pilot two early industry engagement projects with a focus on improving frontline services
- Procurement and Technical Standards working group to develop a suite of standards to inform strategic ICT sourcing
- Issue guidelines for agencies to undertake industry engagement in their own right, so the process and outcomes are repeatable and consistent
- Establish strategic asset management systems and contracts that allow assets and services to be pooled
- Develop a simplified and easier to use 'short form' ProcureIT contract to reduce burden for SMEs
- New modules as part of the Procure IT contract suite to be developed in collaboration with industry

Delivery:

- Q3 2012
- Q1 2013
- Q1 2013
- Q3 2013
- Q3 2013
- Q1 2013
- Q2 2013

Responsibility:

Department of Finance and Services in collaboration with all agencies and industry

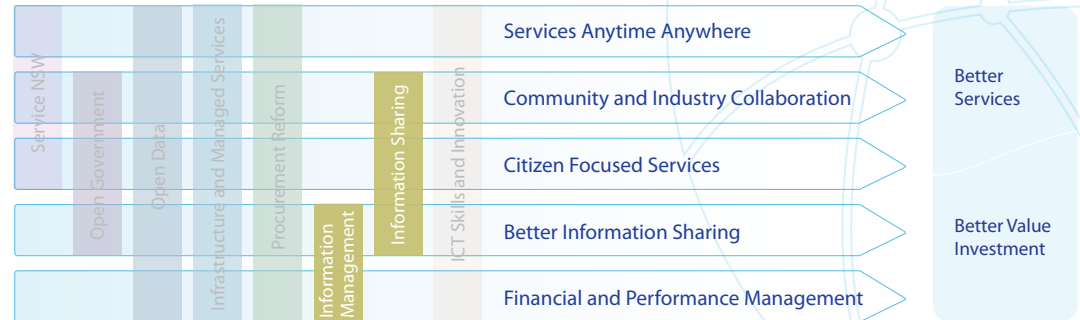
MANAGING INFORMATION FOR BETTER SERVICES



MANAGING INFORMATION FOR BETTER SERVICES

NSW2021: the Government has committed to work across government and with universities to make fine scale climate change projections available to councils and the public.

The ability to share and analyse significant amounts of complex data will be a critical enabler of this commitment.



Building service capability

Improved information management will directly support the Community and Industry Collaboration, Citizen-focused Services, Better Information Sharing and Financial and Performance Management service capabilities outlined in the ICT Strategic Framework.

- **Community and Industry Collaboration** – working closely with the community and industry drives best practice and innovation. We want to learn from the community about how Government is performing and increase satisfaction with services.
- **Citizen-focused Services** – sharing information with the community allows citizens to tell government how they want to receive services and information.
- **Better Information Sharing** – managing our information better will ensure it is consistent and can be shared across government and industry for improved service delivery outcomes.
- **Financial and Performance Management** – agencies will be able to share financial and performance information with central agencies to build a comprehensive picture of how government is performing.

Effective government service delivery requires timely access to the vast amount of data, information and knowledge held across the public sector, and an ability to identify and consolidate that information in a secure, structured and consistent manner. This is a core capability underpinning evidence-based policy development and effective service delivery.

The way the Government manages and uses information is a key factor in improving service delivery. Access to the right information at the right time helps inform government decisions and meet community expectations.

It will be equally important to develop and communicate privacy management principles across agencies to ensure that commercial and private information is securely stored and used appropriately.

The following initiatives will contribute to the Managing Information for Better Services priority.

Information management framework

Government needs a strategic framework that outlines a vision for its information management. This is a substantial task that will include documenting the attributes of good information management and ensuring accurate and accessible information.

Common standards are essential for facilitating the exchange of information and ensuring that the same information from different agencies is comparable. For example, name and address information is currently stored in different formats in different agencies, making it difficult to share information between agencies for better service delivery. It will be important to identify appropriate standards in consultation with other governments including the Commonwealth.

The Department of Finance and Services will lead the development of an Information Management Framework. It will work in partnership with key government agencies to draft and establish guidelines and standards. Government will review and update the Information Management Framework on a regular basis and embed it in agency activity.

The Framework will be a key factor in restoring confidence, trust, and accountability in public administration. Information management policies will be aligned with business needs and existing ICT systems so that they are straightforward to implement.

It will be important that information management responsibilities are straightforward and communicated to all public sector employees and non-government organisation service providers.

In September 2011 the Government announced a joint project between the NSW Police Force and the RTA, enabling police to access driver licence images from police vehicles.

Police will be able to access images from mobile data terminals in police vehicles to quickly and easily identify people and verify the validity of a licence.

Information management framework

Actions:

Establish a common approach to information management and standards

Establish an Information Management Community of Expertise to improve the capability of the NSW Government and address cultural and other barriers to better information sharing and management

Educate and train NSW Government employees in the importance and value of proper information management

Establish a standard information architecture approach for use across government

Identify and promote Centres of Excellence across NSW Government agencies to act as custodians of strategic information assets

Delivery:

Q3 2013

Q3 2013

Q4 2013
and ongoing

Q4 2013

Q4 2013
and ongoing

Responsibility: Department of Finance and Services

Financial and performance management

Management information systems are an essential element of good management practice including service delivery, tracking expenditure and revenue, and managing staff and assets. The NSW Commission of *Audit Interim Report: Public Sector Management* identified financial and performance reporting as a key area where the public sector needs to significantly improve.

The Corporate and Shared Services Reform Program is developing sector wide standards for Enterprise Resource Planning (ERP) systems. This provides a unique opportunity to develop a consistent approach across the sector in key areas such as financial management, human resource management, ICT and procurement.

An overall information framework is needed so that, wherever possible, there is interoperability between cluster/agency systems and those used for central reporting. A key principle is that information for central data collections should be collected once and used many times.

Ideally, this information should be derived from agency operational systems (for example resource planning systems) and used in internal management reporting, central reporting and external reporting purposes. Such an approach requires common definitions and standardised approaches to the classification and collection of management information. This will also enable more effective benchmarking between clusters.

Increasingly there are national and international standards that drive data requirements. These standards assist in improving data quality and enable more accurate comparisons sharing between organisations and jurisdictions. In key service delivery areas this is often driven in Australia through Council of Australian Governments processes.

These 'custodians' of various sector-wide management information, such as the Public Service Commission and central agencies, often have a regulator role across the sector and maintain data sets which have the potential to be the 'single source of truth' for their respective categories.

Finance and performance

Actions:

Develop an integrated reporting framework for management information, identifying what information is required by central agencies and when key reports are due

Establish a governance framework in consultation with clusters and central agencies to develop an integrated approach to performance and management information

Delivery:

Q4 2012

Q3 2013

Responsibility:

Department of Finance and Services, Department of Premier and Cabinet, NSW Treasury

Sharing information assets

Agencies need to be able to share information, especially where services are best delivered through a cross-agency approach.

By making information and knowledge more accessible we can tap into cross-agency service delivery opportunities. As new government service delivery models evolve, the potential for delivering services in collaboration with community, industry and non-government organisations will increase the need for the Government to share information.

To obtain the best possible picture of how to optimise service delivery to a particular city, area or individual it may be necessary to build a case that requires information from a range of agencies. A standard approach to information sharing will allow agencies to work together and share resources. This will be undertaken in a manner consistent with strict privacy and security considerations.

Sharing information assets

Actions:

Seek community and business views on information that could be shared across Government to improve services

Review policy, practice & legislation that is preventing cross-Government sharing of information

Develop a directory of key information assets that can be shared across agencies

Delivery:

Q4 2012

Q2 2013

Q3 2013

Responsibility: Department of Finance and Services

Ensuring the security of government information

The release of government data and information to industry and the community will have considerable benefits in terms of collaborative opportunities, transparency and openness. However, we need to ensure that private information is protected.

The use of information and information systems is an integral part of most NSW Government activities. Electronic information assets are increasingly critical in agency operations and a key element in delivering trustworthy government services.

The Government is moving to strengthen the security of electronic information.

The Government's electronic information security objectives are:

- **Integrity** - to protect information against unauthorised alteration or destruction and prevent successful challenges to its authenticity.
- **Availability** - to provide authorised users with timely and reliable access to information and services.

- **Confidentiality** - to uphold authorised restrictions on access to and disclosure of information including safeguarding personal or proprietary information.
- **Compliance** - to comply with all statutes, regulations, Cabinet Conventions, policies and contractual obligations requiring information to be available, safeguarded or lawfully used.
- **Assurance** - to provide assurance to Parliament and the people of NSW that information held by the Government is appropriately secure.

Electronic information security needs to be implemented in a consistent manner across the NSW public sector as threats to electronic information are increasing. It is essential that the Government demonstrate its commitment to security measures to the community.

Ensuring the security of information held by government

Actions:

The Electronic Information Security Working Group to refine and agree key elements of the Electronic Information Security policy for approval by the ICT Board prior to consideration by Government and the issue of a revised Premier's Memorandum

Convene workshops and seminars with NSW ICT professionals to gauge progress toward implementing the Electronic Information Security policy and to promote best practice examples and information sharing across the sector

Agencies to complete implementation of the Electronic Information Security policy

Delivery:

30 June 2012

2012/2013

1 December 2013

Responsibility: Department of Finance and Services

Making better use of location information

Service delivery and policy development will be significantly improved by being informed by government datasets that incorporate location information.

Government owned datasets that incorporate location as an element should be made readily available for use across government to support the delivery of new services. There are also significant opportunities to remove duplication, facilitate reuse and create more linkages across datasets which support policy development and implementation.

A whole of government approach will enable access to location information, infrastructure and services for all levels of government, the private, non-profit and academic sectors, and the general community.

The NSW Government Spatial Information Exchange (SIX) is the official source of NSW geospatial information. It is an online tool to allow location enabled data to be combined, analysed and visualised. This will be integrated with data.nsw.gov.au.

Location enabled data already plays a significant role across government services, transportation and telecommunications by providing the capability to gather, summarise and visualise data across diverse geographic locations.

Location data

Actions:

Secure formal approval of a Foundation Spatial Data Infrastructure

Integrate the Spatial Information Exchange and data.nsw

Develop a NSW Spatial Custodianship Policy and Guidelines

Delivery:

Q4 2012

Commencing in Q4 2012 with completion by Q2 2014

Q4 2012

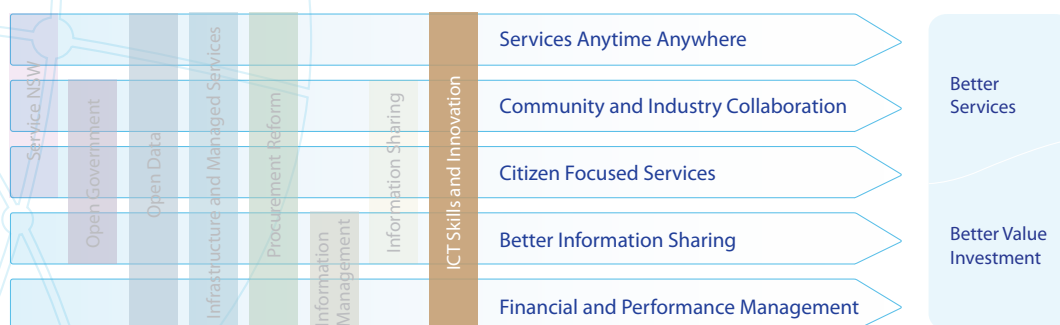
Responsibility: Department of Finance and Services



ICT SKILLS AND INNOVATION



ICT SKILLS AND INNOVATION



Building service capability

Developing our public sector ICT skills will enable improvement in all five service capabilities.

- **Services Anytime Anywhere** – we will have the technical knowledge to develop and source best practice ICT-enabled services that are independent of time and location restrictions.
- **Community and Industry Collaboration** – the public sector will have high level skills in online engagement.
- **Citizen-focused Services** – we will develop a public sector that is expert in developing information and service delivery models consistent with community and industry expectations.
- **Better Information Sharing** – the public sector will have the skills to build interoperable systems that facilitate the sharing of government information.
- **Financial and Performance Management** – we will develop our finance and performance reporting skills to make informed decisions about where resources are needed and how the Government is performing in meeting its service delivery objectives.

NSW ICT Strategic Framework:

We will develop a competency and skills framework that will identify the priority skills and capabilities required by government, to ensure we have the right mix in-house to support our ICT business objectives.

This framework will also support mechanisms to share skilled resources across government.

Our people are key enablers of improved service delivery and better value ICT investment. Given the need to share information, make it more available, drive innovation and work closely with the industry and research sectors, it is essential that knowledge of how ICT can improve public services is available to all public sector policy and project staff, beyond our IT people.

It has been recognised that skills development needs to be tailored for executives, business leaders, policy staff and ICT technical professionals, given that different staff will require different training and skills. Training will be closely linked to the technology that is being implemented across government.

Given the Government's new approach to the adoption of managed services, it will be increasingly necessary to outsource certain skillsets. The Government recognises that it may be more cost efficient and practical to buy in skills in specific areas on an as needs basis.

NSW ICT Strategic Framework:

We will develop mechanisms to ensure that ICT implications are considered early in the policy development process, with the same status as risk, legal and financial considerations.

This will ensure effective ICT implementation in support of government policy decisions, and also provide for emerging technologies and approaches to drive innovation in policy development and service delivery.

Partnership with the Public Service Commission

The public sector will need a workforce that has the right mix of ICT skills to deliver the actions outlined in this Strategy.

The NSW public sector capability framework defines the skills, knowledge and abilities that are relevant to NSW public sector staff. The framework helps the Government recruit and select people with the right capabilities now and into the future. The capability framework should have a strong ICT component for policy, service delivery and project management staff.

The Public Service Commission and the Department of Finance and Services will conduct a joint project to identify where the public sector needs to develop its skills base, and how to attract and retain the right people.

The project will map the Strategy's infrastructure and managed services and procurement initiatives against relevant capability requirements and analyse how the public sector needs to be positioned to deliver them. For example, the sector will require a strong mix of project and contract management skills in a different and developing ICT operating environment.

The Public Service Commission will review the sector's existing ICT staffing profile and develop a workforce model that accounts for capability needs and in-house ICT requirements. The review will provide a clear picture of the current public sector capability and what will be required in the future.

A working group will be established from across Government and industry to develop strategies that promote and support a consistent whole of sector approach to ICT workforce structures, position types and career paths.

These strategies will be supported by a capability and accreditation framework that ensures consistency in performance standards, an objective basis for performance management and formal skills recognition and qualifications.

Underpinning the success of this approach will be a strong professional development component through cross-sector networking and sharing of experiences where ICT has been successful in delivering innovative service delivery mechanisms.

ICT skills and capability development

Actions:

Enhance the NSW Public Sector Capability Framework to incorporate ICT skills and knowledge

Create an ICT Skills and Capability Working Group to ensure a whole of government approach to ICT capability

Map the anticipated configuration of ICT functions and activities in NSW Government agencies within 2-5 years

Review the current state of the NSW Government ICT workforce, including contractors and contract usage

Review the characteristics of the ICT labour market

Determine the shape and characteristics of the future ICT workforce, and any current gaps

Develop a strategy to meet public sector ICT requirements including:

- capability and accreditation frameworks
- recommendations on appropriate employment arrangements
- tailored recruitment tools
- managing performance, retention and turnover of the ICT workforce

Partner with industry associations to leverage industry ICT skills accreditation and training programs

Delivery:

Q1 2013

Immediate and ongoing

Q4 2012

Q4 2012

Q4 2012

Q1 2013

Q3 2013

Q1 2013 and ongoing

Responsibility:

Public Service Commission, Department of Finance and Services

Partnerships for innovation

NSW is home to a significant number of Australia's ICT research organisations. National ICT Australia (NICTA), the Smart Services Cooperative Research Centre (SSCRC) and the Australian Centre for Broadband Innovation (ACBI) are key research bodies which are well placed to assist Government in driving innovation and sharing best practice.

There is an opportunity for Government to engage with industry associations and research bodies to assist in connecting the public service with industry best practice and the latest technologies.

For example, NICTA's Digital Productivity Showcase is a state-of-the-art special purpose demonstration and collaboration area for designing productivity tools around the digital economy. The facility bridges the gap between research, local software companies and end-users including business and government. It provides an opportunity for Government to investigate the latest digital tools and services on the market.



Sharing best practice and innovation across government

The innovative use of ICT offers significant opportunities to improve service delivery. The Department of Finance and Services will identify examples of best practice ICT and promote them across government.

It is important that the public sector is positioned to match the rapid emergence of new technologies with innovative thinking on how to apply them to service delivery. There are numerous examples of ICT enabled solutions in other jurisdictions and in the private sector and the NSW Government can learn from those examples of best practice.

Agencies need to be positioned to engage early with the industry and research sectors to identify how ICT can assist government to meet its service delivery objectives. Engaging with small and medium-sized enterprises will be critical in identifying new and innovative solutions.

ICT public sector innovation

Actions:

Promote early engagement with industry that will link desired policy outcomes with innovative solutions

Promote agency participation in NICTA's Digital Productivity Showcase to understand benefits of new service delivery technologies

Work with Australian eGov Technology Cluster to encourage SMEs to develop innovative solutions for government

Deliver workshops/events that identify best practice ICT delivery across government

Build a knowledgebase of best practice examples of ICT enabled service delivery from the public, industry and research sectors

Identify and actively promote best practice ICT enabled service delivery through the ICT Strategy website, workshops and events to communicate what works well in government

Delivery:

Q1 2013

Q3 2012
and ongoing

Q3 2012
and ongoing

Q3 2012
and ongoing

Q4 2012
and ongoing

Immediate
and ongoing

Responsibility: Department of Finance and Services

GOVERNANCE

The NSW Government's approach to ICT investment benefits from governance arrangements that ensure senior government decision makers share responsibility for major ICT decisions and whole of government strategic direction.

The ICT Board reports to the Minister for Finance and Services and comprises seven Directors-General and the Chair of the ICT Industry Advisory Panel. It will have a portfolio management role and maintain high level strategic oversight of ICT projects.

The Board is supported by the ICT Leadership Group, which comprises Chief Information Officers and senior business managers at the Deputy Director-General level from across government.

The ICT Advisory Panel provides invaluable expertise from the business and research sectors. The Panel advised government on the *NSW Government ICT Strategic Framework* and the development of the NSW Government ICT Strategy through its participation on the service capability working groups.

The Role of the ICT Board

The ICT Board was established in July 2011 as a high level non-statutory body chaired by the Director-General, Department of Finance and Services, and comprising six other Directors-General and the Chair of the ICT Industry Advisory Panel.

ICT Board Members

Michael Coutts-Trotter (Chair)	<i>Director-General Department of Finance and Services</i>
Chris Eccles	<i>Director-General Department of Premier and Cabinet</i>
Michele Bruniges	<i>Director-General Department of Education and Communities</i>
Dr Mary Foley	<i>Director-General Ministry of Health</i>
Mark Paterson AO	<i>Director-General Department of Trade and Investment</i>
Les Wielinga	<i>Director-General Transport for NSW</i>
Philip Gaetjens	<i>Secretary The Treasury</i>
John Baird	<i>Head of Global Technology Production - Australia/New Zealand, Deutsche Bank Chair of the NSW Government's ICT Advisory Panel</i>



The Board's terms of reference are to:

- Drive development of the whole of government ICT Strategy and implementation plan on behalf of Government, for submission to Cabinet.
- Make decisions on strategic issues, other than those that need to be referred to Cabinet, consistent with existing Government policy and accepted practice for Directors-General, such as the Directors-General Executive Committee.
- Monitor performance and compliance of agencies against agreed whole of government ICT strategies and policies.
- Oversee the operation of the ICT Advisory Panel and Government ICT Leadership Group.
- Recommend to Cabinet the criteria to be used to assess agency requests for opt-outs from agreed common approaches and policy.
- Review and update the whole of government ICT Strategy and Implementation Plan, as required, and determine those matters which should be submitted to Cabinet.
- Ensure appropriate engagement with key stakeholders within and outside government, particularly in relation to NSW Government reform programs such as Corporate and Shared Services Reform.
- Recommend the format for the annual Ministerial Strategic ICT Forum.

The Board will have a number of key responsibilities so it can fulfil its role in ensuring that government ICT expenditure is targeted and is good value, and that the community receives the benefits they have paid for. These will include:

- **Setting whole of government ICT investment principles**

The ICT Board would be responsible for setting and monitoring compliance with whole of government ICT investment principles. This will allow government to move what is currently a fragmented and inconsistent ICT infrastructure to a more consistent, shared and standardised approach.

- **Reviewing ICT investment and gateway processes**

Current investment processes are time consuming, costly, and bureaucratic, and have not prevented the fragmentation of ICT investment or projects running significantly over time and over budget. With the new ICT governance arrangements in place in NSW, it is timely to review these processes to ensure they are the most effective and efficient way to deliver on the Government's ICT objectives.

- **ICT procurement reform**

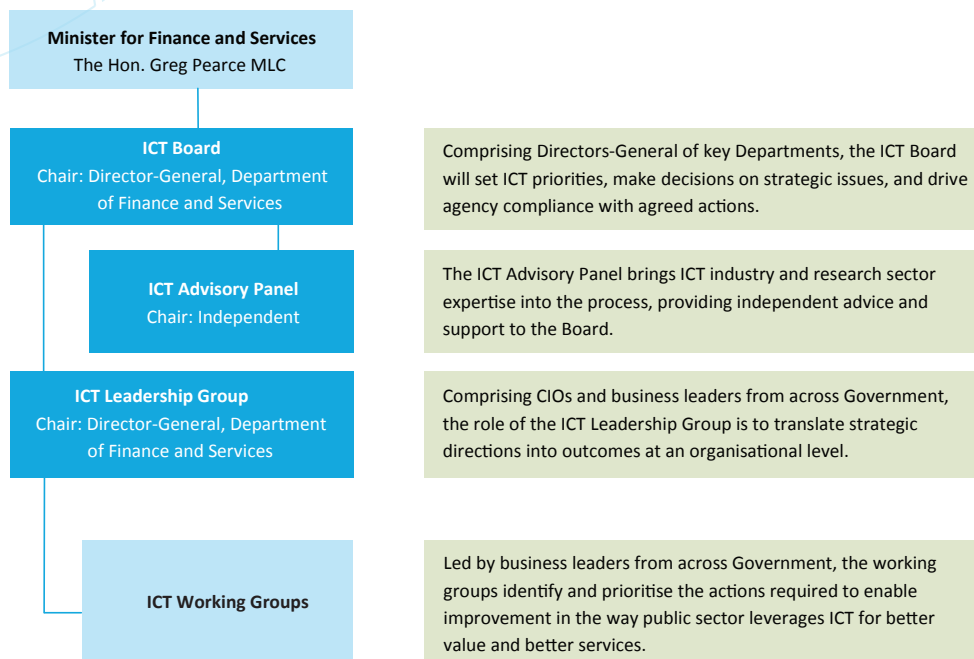
The NSW Government's discussion paper on government procurement reforms proposes a new procurement model, which is anticipated to be finalised by the middle of 2012. The procurement model outlined in the paper establishes a NSW Government Procurement Board with similar membership to the ICT Board. It also proposes that the Department of Finance and Services may be the category manager for certain ICT procurement where it is best managed as a central function.

- **Promote collaboration**

Much of the data and information gathered to support the above functions could be leveraged to identify opportunities for reducing duplication, sharing investments, and reducing costs across government. Having a detailed oversight of ICT investment plans across government will provide a clear opportunity to identify projects with common objectives or common ICT enablers. This will allow the ICT Board to consider proposals for sharing, collaborative project development and collaborative sourcing.

The Board's oversight will be informed by detailed ICT benchmarking data, analysis of agency investment plans, oversight of ICT business cases and other analysis.

NSW Government ICT Governance



Feedback from industry will be essential in assessing our success in adopting and implementing a new central approach to ICT. Industry and research sector consultation will be an ongoing part of the way Government approaches its service delivery and better value ICT investment objectives.

While the Industry Advisory Panel will provide regular advice to Government, we will work closely with the business sector as we implement the initiatives in this Strategy.

IMPLEMENTATION PLAN

SERVICE NSW													
Initiative Lead Agency	Action	2012				2013				2014			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Service NSW Department of Premier and Cabinet	Prioritise the development of the business case, including the Technology Roadmap, for the establishment of Service NSW												
	Implement the first tranche of Service NSW												
	Expansion of Service NSW service offerings, locations and channels												



OPEN GOVERNMENT

Initiative Lead Agency	Action	2012				2013				2014			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Open Government Department of Premier and Cabinet	Publish an Open Government Plan												
	Implement a whole of government policy that supports the use of social media for enhanced public engagement and service delivery												
Social Media Department of Premier and Cabinet	Make reference guidelines available to agencies for public sector employees use of social media												
	Facilitate greater public consultation on major policy development												
Community Consultation Department of Premier and Cabinet	Expand and promote Publications NSW as the default and easily searchable repository for published Government information, reports, policies and other announcements												
	Publish guidance on compliance with GIPA requirements and voluntary disclosure of government information												
Publications NSW Department of Finance and Services Office of the Information Commissioner	Monitor and report on GIPA requirements and proactive disclosure												
	NSW agencies to investigate making templates and reporting forms available online and accepting electronic submission of updates and reports												
Website Design Department of Premier and Cabinet	NSW agencies to investigate online renewal of Government licences, including updating customer and business details												
	Develop best practice website, smartphone and tablet design guidelines												

INFRASTRUCTURE AND MANAGED SERVICES

Initiative Lead Agency	Action	2012				2013				2014			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Service Catalogue Department of Finance and Services	Develop and implement policies to support the service catalogue in collaboration with industry and other agencies												
	Build a service catalogue in collaboration with industry and other agencies												
Virtualisation and consolidation Department of Finance and Services	Agencies to develop virtualisation plans												
	Prioritise a business case for making virtualisation licences available to agencies on the basis of business need												
	Update Service Catalogue items relating to provision of virtualised machines												
	Execute virtualisation plans												
Cloud Department of Finance and Services	Establish pilot private cloud offering												
	Development of the trusted Government private cloud												
	Policy frameworks in place to support public cloud offerings through Service Catalogue												
	Migrate agency environments to trusted Government private cloud												

PROCUREMENT REFORM

Initiative Lead Agency	Action	2012				2013				2014			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Procurement Reform Department of Finance and Services	Expand the role of the ICT Board to include the governance of ICT procurement												
	Pilot two early industry engagement projects with a focus on improving frontline services												
	Develop a simplified and easier to use 'short form' Procure IT contract to reduce burden for SMEs												
	Procurement and Technical Standards working group to develop a suite of standards to inform strategic ICT sourcing												
	New modules as part of the Procure IT contract suite to be developed in collaboration with industry												
	Issue guidelines for agencies to undertake industry engagement in their own right, so the process and outcomes are repeatable and consistent												
	Establish strategic asset management systems and contracts that allow assets and services to be pooled												



MANAGING INFORMATION FOR BETTER SERVICES

Initiative Lead Agency	Action	2012				2013				2014			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Information Management Framework Department of Finance and Services	Define clear information management accountabilities and responsibilities across all levels of agencies for all public sector employees												
	Establish standards for spatially enabling information												
	Establish a common approach to information management and standards												
	Establish an Information Management Community of Expertise to improve the capability of the NSW Government and address cultural and other barriers to better information sharing and management												
	Develop guidelines to assist agencies manage / transition legacy information and data (including identifying appropriate material for digitisation)												
	Establish a standard information architecture approach for use across government												
	Establish a portal to access 'Sources of Authority' for information management guidance												
	Educate and train NSW Government employees in the importance and value of proper information management												
	Identify and promote Centres of Excellence across NSW Government agencies to act as custodians of strategic information assets												
	Develop metadata frameworks to enable searching across diverse systems												
Finance & Performance Department of Premier and Cabinet	Develop an integrated reporting framework for management information, identifying what information is required by central agencies and when key reports are due												
	Establish a governance framework in consultation with clusters and central agencies to develop an integrated approach to performance and management information												

MANAGING INFORMATION FOR BETTER SERVICES

[illegible]

MANAGING INFORMATION FOR BETTER SERVICES

Initiative Lead Agency	Action	2012				2013				2014			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Location Enabled Data Department of Finance and Services	Secure formal approval of a Foundation Spatial Data Infrastructure												
	Develop NSW Spatial Custodianship Policy and Guidelines												
	Facilitate agencies to spatially enable their data and make it publically available												
	Extend the Spatial Information Exchange architecture for use across all agencies												
	Integrate the Spatial Information Exchange and data.nsw												

ICT SKILLS AND INNOVATION

Initiative Lead Agency	Action	2012				2013				2014			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
ICT Skills and Capability Development Department of Finance and Services	Create an ICT Skills and Capability Working Group to ensure a whole-of-government approach to ICT capability												
	Map the anticipated configuration of ICT functions and activities in NSW Government agencies within 2 years and 5 years												
	Review the current state of the NSW Government ICT workforce, including contractors and contract usage												
	Review the characteristics of the ICT labour market												
	Determine the shape and characteristics of the future ICT workforce, and any current gaps												
ICT Public Sector Innovation Department of Finance and Services	Enhance the NSW Public Sector Capability Framework to incorporate ICT skills and knowledge												
	Develop a strategy to meet public sector ICT requirements												
	Partner with industry associations to leverage industry ICT skills accreditation and training programs												
	Identify and actively promote best practice ICT enabled service delivery through the Strategy website, workshops and events to propagate what works well in government												
	Promote early engagement with industry that will link desired policy outcomes with innovative solutions												
ICT Skills and Capability Development Department of Finance and Services	Build a knowledgebase of best practice examples of ICT enabled service delivery from the public, industry and research sectors												
	Work with Australian eGov Technology Cluster to encourage SMEs to develop innovative solutions for government												
	Promote agency participation in NICTA's Digital Productivity Showcase to understand benefits of new service delivery technologies												
	Deliver workshops / events that identify best practice ICT delivery across government												



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Department of Finance and Services

McKell Building
2-24 Rawson Place Sydney NSW 2000
T 02 9372 8877 F 02 9372 8640
Business hours: 8.30am - 5.30pm
www.services.nsw.gov.au

