



The **future** of information and communication technology in the Queensland Government **2013–17**

a discussion paper

We're going to offer modern service delivery systems that put Queenslanders first, and saves Queenslanders money ...

Premier of Queensland Campbell Newman, 19 September 2012

Table of contents

Introduction	3
ICT in the Queensland Government – the present	3
ICT in the Queensland Government – the future	4
Achieving government outcomes	4
Revitalising front-line services for families	5
Deliver better infrastructure and better planning	5
Restore accountability in government	6
The Queensland Government ICT strategy	6
Our proposed vision	7
Proposed guiding principles for the future	7
Key areas for discussion	10
Strategic focus areas for change	11
Key areas for discussion	15
Service transformation	16
Efficient digital services for government.	16
Digitally-aware and competent staff	17
Digital services for clients	18
Management framework	19
Next steps	20

Introduction

Information and communication technology (ICT) plays a key role in the delivery of government services to Queenslanders. It helps government agencies to streamline processes, share information and provides people with access to services online.

ICT has the capacity to help satisfy public expectations for government services while managing the increasing demands and costs of social services.

To ensure technology is used to deliver high-quality services now and in the future we need to develop and implement a considered ICT strategy.

In looking to the future, the Queensland Government will need to assess and implement technology differently – moving from technology in general to how technology can enable effective service delivery to Queenslanders.

The Queensland Government is seeking input to develop this strategy, and we welcome your ideas and suggestions on how the government can get the most benefit from technology.

Releasing this discussion paper does not set or imply a government policy or funding position, rather it is designed to collect feedback and input to be used to create a relevant strategy for the future.

How to contribute

Consider the questions in this paper and visit www.getinvolved.qld.gov.au to have your say on this important initiative. You can also submit your comments by emailing ictstrategicsourcing@qld.gov.au.

ICT in the Queensland Government – the present

We know we need to change our approach to the use of technology within government. The focus must be more on how the use of technology can enhance our service delivery. The private sector is leading the way in this regard. The government needs to position itself so that it can take timely advantage of current and future private sector product and service offerings.

Ineffective ICT administration has been the subject of numerous Queensland Auditor-General reports and most recently the Queensland Health Payroll System Commission of Inquiry.

Recurring themes from each of these suggests that in deploying technology solutions, there has been lack of accountability and ownership to:

- drive whole-of-government projects
- deliver benefits
- review controls
- ensure consistent approaches are taken for risk management¹.

The accepted recommendations of the Queensland Commission of Audit report provide a strong basis for reform and will be reflected in our future strategy for ICT.

¹ Auditor General Report 7 for 2010, Auditor General Report 4 for 2011.

Since March 2012 the Queensland Premier has outlined a clear agenda for change. Renewal and revitalisation of the public service is key to that change. To support the government's reform agenda, there is a need for the public sector to find new and exciting ways to facilitate service delivery through technology.

Unfortunately, the public sector has been applying out-dated ICT management policies and practices to manage investment in ICT assets, instead of managing investment in service delivery.

ICT assets have not been maintained and are now hindering service delivery by preventing information from being available, accessible and reliable to the government, its departments and industry.

ICT in the Queensland Government – the future

Our future strategy needs to ensure that ICT services form part of the strategic outlook of all agencies when determining service delivery options.

The proposed Queensland Government ICT strategy should envision a public sector working in partnership with the non-government sectors to enhance both government service delivery and Queensland's digital economy.

Government needs to become a more sophisticated user of technology to create ongoing two-way conversations with the community to deliver better policy outcomes.

Costs need to continue to be driven lower, along with improved outcomes, so effective partnering with non-government and industry providers is a high priority. We need to determine the appropriate mix of owned versus outsourced ICT products and services.

The open data strategy will continue to be a priority, but will become part of a comprehensive information management strategy that will promote innovative use of government information and improved information sharing across agencies.

Our ICT procurement approach must be simple and considered a vital part of delivering government services.

Finally, we need to create a management framework that is focused on making business decisions that lead to improved services and outcomes.

Achieving government outcomes

Transformed use of ICT in government will underpin departments' business transformation as part of the public sector renewal agenda. By using a new, modern approach to ICT, and providing better outcomes for Queenslanders we will be supporting the core Queensland Government priorities.

Revitalising front-line services for families

It is intended that the strategy will provide a pathway for government to revitalise front-line services by becoming an efficient buyer and user of digital services, helping to reduce administrative operating costs and, at the same time, improving the way we interact with the community.

We will seek to improve front-line services like health, ambulance, fire and police through access to data from across government to provide more accurate and reliable information for decision makers in day-to-day, as well as crisis situations.

The reduction of cost of accessing government services should be a key goal, especially for people in rural and remote areas of Queensland, as more information, tele-health services and transactional capability is made available online.

Improved technology will help provide more flexible working arrangements, providing a better quality life for Queensland families and help reduce the gap between businesses in remote areas and major cities.

Another opportunity will be to ensure the rich history of Queensland and its important state records are made more secure and accessible through a rejuvenated approach to digital archiving.

Deliver better infrastructure and better planning

ICT represents a significant and expensive asset of government, but unlike public building the lifecycle of ICT is short. Upgrades need to be undertaken on a regular basis and, if neglected, can result in high management costs.

ICT costs are placing a significant burden on government budgets simply to maintain systems that are either at or nearing the end of their useful life. The cost of replacing these systems using the conventional approach is prohibitive.

Our strategy will aim to address these problems by taking a new approach to sourcing ICT services by replacing costly aged systems in a much shorter timeframe than would be possible previously.

This will involve potential adoption of a range of procurement solutions focusing predominantly on outsourcing. While the migration to this approach carries some risk, there is significant cost and service delivery benefits to be gained.

Queensland Government will increasingly become a purchaser of ICT services from private providers, and will safely but aggressively seek to reduce ownership and management of ICT assets and non-critical software applications.

Restore accountability in government

There is ample evidence to suggest that well-publicised failures of major ICT projects in Queensland have been the direct result of ineffective governance and poor program and project management.

The proposed strategy will aim to provide a way of addressing those shortcomings by requiring that agencies implement and consistently apply a best practice model of portfolio, program and project management.

A revised ICT management framework will also seek to provide clear and transparent points of accountability and responsibility.

In order to achieve the benefits that will accrue from our renewed approach to ICT, it is proposed efforts will be focused around setting meaningful objectives and achievable performance targets.

It is proposed that the Queensland Government's ICT strategy will focus on sharing more government information with both the community and industry. This will ensure Queenslanders have better visibility of government's activities and decisions, and will help make the government more open and accountable.

The Queensland Government ICT strategy

We are currently working on a strategy for the future.

It is proposed that the Queensland Government ICT strategy will aim to accomplish three things:

- Ensure that government deploys technologies that benefit the community.

Community members should be able to experience all government services the way they experience other digital services. This means digital channels that allow the community to interact with its government, whether that is to inform debate, purchase, register, supply or engage with it.

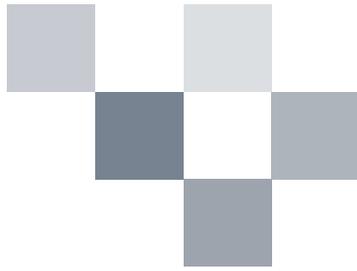
- Enable the government to purchase digital services from the market to support service delivery.

The responsibility for purchasing ICT services resides with those responsible for delivering the government services they support. Government departments will seek to foster a culture that promotes opportunities to deploy digital services to improve the government services they deliver to the community.

- Enhance support for the digital economy by making government information and services easily accessible.

Government information is public property. It is available to industry to grow the economy and to the community for their information. Government will engage with industry to seek opportunities to strengthen the digital economy in Queensland.

Our proposed vision



A transformed public service that is focused on improving services for Queenslanders, by better use and analysis of government data, and by using modern, cost-efficient technology.



For Queenslanders this will mean:

- individuals have access to cost-effective services when and where they need them – through the delivery channel of their choice
- they are engaged as individual customers of government rather than customers of multiple departments
- they have increasing access to online services and equity of access to all Queenslanders.

For the Queensland Government this will mean:

- simplified information management and business processes supported by digital services
- that government partners with industry and non-government organisations to implement comprehensive digital services
- the public sector purchases digital services from the market through efficient supply chains
- the public sector participates in projects that are small and achievable
- government culture shifts from process-oriented to customer-centric.

For industry and the non-government sector this will mean:

- access to government data to strengthen Queensland's digital economy
- robust engagement models are in place that helps industry inform government about appropriate solutions.

Proposed guiding principles for the future

A set of principles have been proposed to guide the future approaches to how the government invests in technology.

ICT investment principles

1. Directors-general will be accountable for their strategic ICT investment portfolio, and monitor the ICT risk associated with the investments.
2. Multi-department investments will be favoured over individual department options.

3. Government agencies will consistently apply the Queensland Government portfolio, program and project management methodologies for making ICT investment decisions. For those initiatives that meet high value, high cost or extreme risk profiles as assessed through the methodology, the requirements of the Queensland Treasury project assurance framework will also be met.

Proposed outcomes

- **Accountability:** Responsibility for delivery is clearly set at all levels with one point of accountability for outcomes. Risk management is embedded within the methodology.
- **Evidence-based investment decisions:** Applying the methodology requires detailed analysis of business cases, the application of independent assurance and quality and financial analysis processes.
- **Stronger focus on whole-of-government and multi-department investment decisions** will improve efficiency, reduce cost and provide a pathway to consolidation necessary to deliver future services in different ways.
- **Benefits management:** To continue the focus on accountability, chief executive officers will be accountable for ensuring investments result in benefits being delivered.
- **More productive industry engagement:** Stronger application of the early market engagement process will result in reduced cost to industry and to agencies, and better outcomes for government.

ICT design approach principles

1. The Queensland Government's approach to solution design will be outcomes-focused, with sourcing and procuring ICT as a service as a default or first call option. All new initiatives will be assessed through a formal process to ensure this is the case.
2. Agencies will share data sets and adopt a consistent approach to open data practices.
3. Industry will be actively engaged in solution design.
4. Investment in skills development will be made where new skills need to be grown to support a focus on innovative managed service delivery solutions.
5. Wherever possible, government will procure ICT solutions as a service.

Proposed outcomes

- **Removal of duplication of effort** across agencies towards an aligned whole-of-government approach.
- **Improved information sharing** across government agencies and with industry and Queenslanders.
- **Improved conditions for innovation** in industry.
- **Commodity services managed by or in partnership** with industry.

- Reduced costs over time.
- Outcomes-focused design.
- Reduced ‘go-to-market’ time.
- Improved contract and performance management.

Delivery approach principles

1. Our approach to service delivery has at its core the principle that government does not own and operate ICT facilities and commodity ICT.
2. External provision of ICT as a service is the preferred option for all future initiatives.
3. Delivery of services is based on strong contractual, service level and operating level arrangements.
4. Delivery standards will be outcome focused and value-for-money assessments and reporting on return on investment will be embedded processes.
5. Government ICT policy and service delivery activities are separated.
6. Independent assurance will be undertaken in addition to programs and projects using consistently applied portfolio, program and project management methodologies, including gateway approval processes.
7. All high-risk business systems will be regularly assessed using an approved risk management methodology, and their condition will be regularly reported to government.

Proposed outcomes

- Pragmatic policy to support service delivery future directions in a coherent way.
- Business-led investment, where ICT investments will be made based on the strategic outcomes required by government.
- Contestable service delivery to ensure best value for money.



Key areas for discussion

The government, in consultation with key industry stakeholders, is seeking ways to improve the future states of government ICT in Queensland.

A draft vision, guiding principles and associated outcomes are also proposed to drive both cultural and practical change over the life of the strategy.

Your comment is sought on:

- Do you agree that the outcomes presented will better place the government in using technology to enhance its service delivery?
- Do you believe that the outcomes can be measured?
- If the outcomes are achieved, do you consider that government's ICT risk will be adequately managed?
- Do you agree that adopting the principles and delivering the outcomes result in more efficient business arrangements with industry?

How to contribute

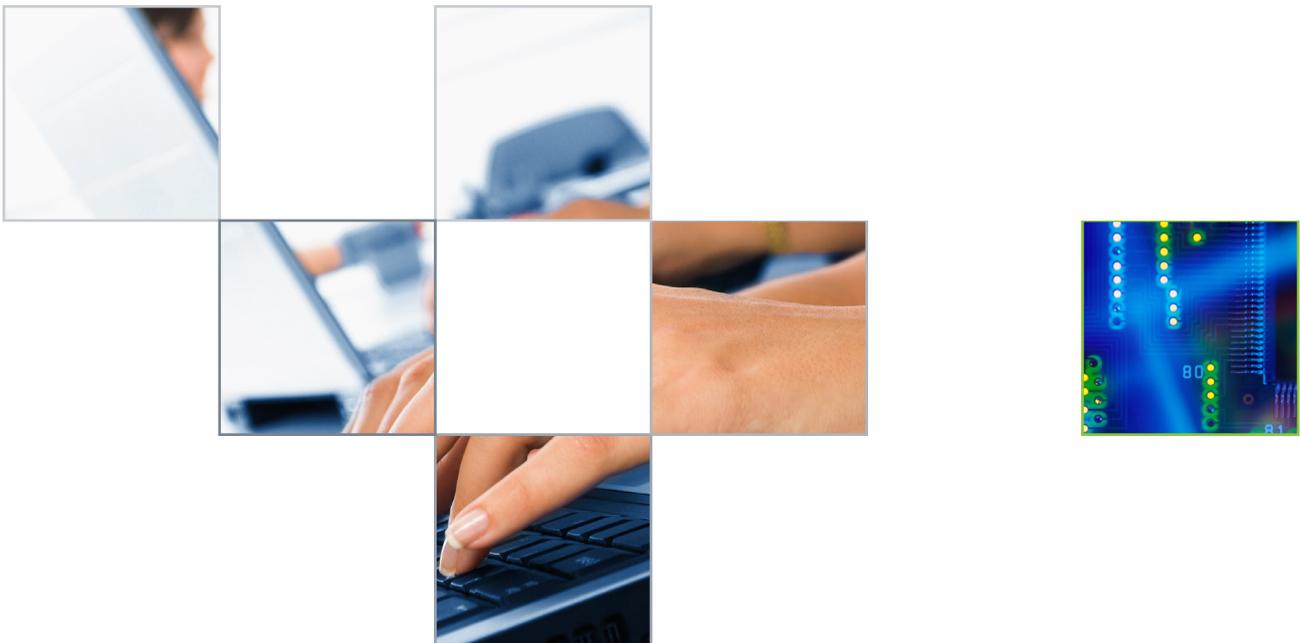
Consider the questions in this paper and visit www.getinvolved.qld.gov.au to have your say on this important initiative. You can also submit your comments by emailing ictstrategicsourcing@qld.gov.au.

■ Proposed strategic focus areas for change

Applying the core principles and delivering the desired outcomes can be achieved by bringing together a set of co-existing strategies and plans. Together, it is intended that these will embed ICT in the service delivery framework of government and departments.

A number of strategic focus areas are proposed to help organise how we will achieve the necessary change. Each strategic focus area represents a major opportunity to contribute to the Queensland Government's renewal efforts. The strategic focus areas are organised under three key areas:

- efficient digital services for government
- digitally-aware and competent staff
- effective digital services for our clients.



The following table lists the strategic focus areas together with their possible measures during the life of the strategy.

Efficient digital services for government

Focus area	Measures
Digital economy strategy	The percentage of all digital economy policies which aim to stimulate digital services market growth
Digital skills strategy	A digital skills strategy will be developed and implemented
Contestability and ICT strategic sourcing	Contestability framework of government is applied in all agencies A defined percentage of government email resides in cloud services The Queensland Government reduces its ownership of ICT applications and facilities
ICT as a service	The Queensland Government reduces its ownership of ICT infrastructure

Our officers are competent and confident

Focus area	Measures
Workforce transformation	Workforce transformation is completely aligned with service transformation, i.e. staff are repositioned or reskilled and supported through change A performance management model is developed for ICT staff
Program and project management competency	Transformation and change capability increases maturity across all government departments
Contract and performance management	A defined percentage of government staff engaged in ICT procurement
Service management	A defined percentage of government staff made competent in contracts and contract performance management

Effective digital services for our clients

Focus area	Measures
Digital archiving strategy	A prototype digital archive for permanent value government digital records using an access system that provides seamless access across digital and traditional format archives A whole-of-government regime for supporting the management of digital public records for future generations in compliance with standards and practices that minimise the risk of loss of those records due to technological obsolescence
Information management	A defined percentage of all government records are accessible through a standard process
Open data initiative	A defined percentage of all publishable government data is accessible to industry and the community
Government service delivery and community accessibility strategy – one-stop shop	A defined percentage of all government services are available through one website and with the ability to conduct all basic transactions

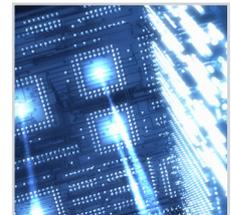
Each focus area is intended to provide an opportunity to make major changes to the way the Queensland Government uses its ICT investments to support and deliver government services. The expected benefits from these changes will be tracked and reported through the management framework. The table proposes an overarching measure for each focus area that will guide the development of an implementation plan for each focus area as well as guiding individual department's ICT strategies as they support the Queensland Government ICT strategy.

The changes required from each strategic focus area are outlined below.

Efficient digital services for government

Our proposed strategic focus areas to ensure efficient digital services for government include:

- Strategic focus area 1 – Digital economy strategy: An external-facing strategy creating conditions for economic and social services innovation.
- Strategic focus area 2 – Digital skills strategy: An external-facing strategy for developing community awareness and capability, to improve digital infrastructure.
- Strategic focus area 3 – Contestability and ICT strategic sourcing: An internal strategy for delivering low-cost commoditised services.
- Strategic focus area 4 – ICT as a service: An internal strategy to deliver a government-wide management framework for governing and delivering business-focused ICT solutions.



Competent and confident staff

Our proposed strategic focus areas to ensure our human resources are sufficiently digitally competent include:

- Strategic focus area 5 – Workforce transformation: An internal strategy to ensure staff are in appropriate positions that support business strategy and have appropriate skills to fulfil their roles.
- Strategic focus area 6 – Program and project management competency: An internal strategy to drive improved program and project management and to ensure that executive management is supported in ICT investment decision making.
- Strategic focus area 7 – Contract and performance management: An internal strategy to drive improved contract and performance management and support the move to managed ICT services
- Strategic focus area 8 – Service management: An internal strategy to support changes to business service delivery.



Digital services for clients

Our proposed strategic focus areas to ensure effective digital services for clients include:

- Strategic focus area 9 – Digital archiving strategy: Both internal- and external-facing strategies to deliver ongoing access to the critical digital records of government business.
- Strategic focus area 10 – Information management: An internal strategy to enable management of government’s information as a valued and valuable asset.
- Strategic focus area 11 – Open data initiative: To drive publication of data sets of government and provide access to those data sets to the community. Data sharing as the rule not the exception.
- Strategic focus area 12 – Government service delivery and community accessibility strategy – one-stop shop: An internal strategy to deliver a one-stop shop approach to accessing government services.



■ Key areas for discussion

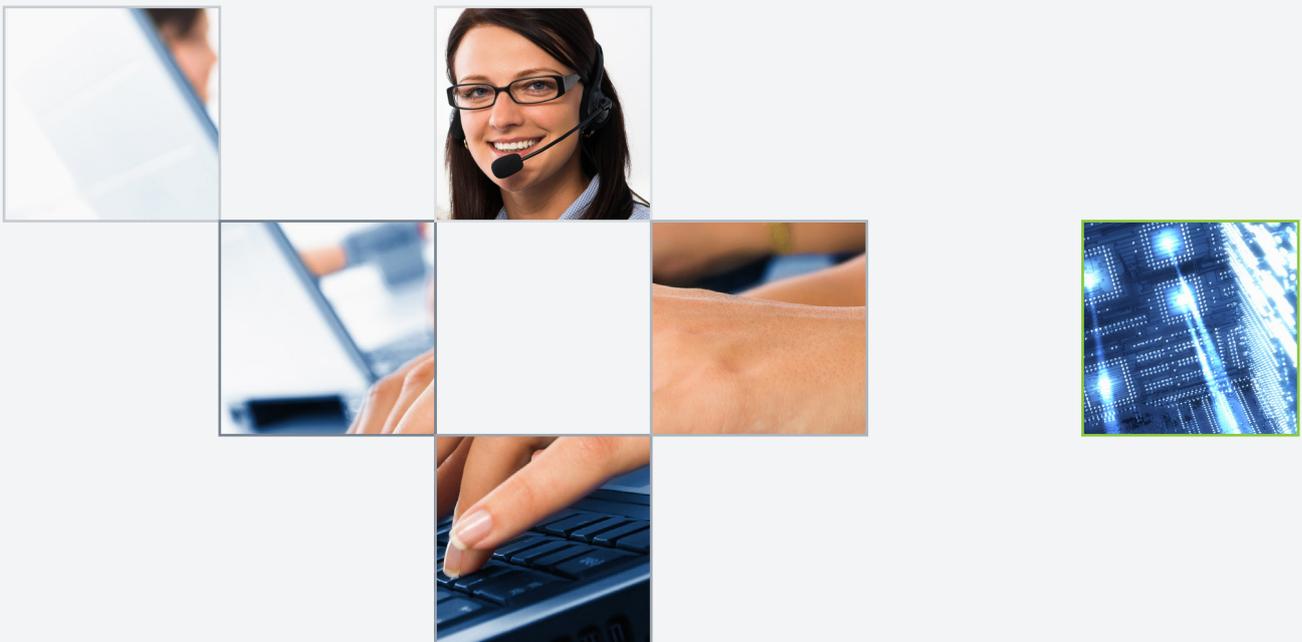
This section has described how we will move from the strategic level and into actions that will deliver change.

Your comment is sought on:

- Does the grouping of co-existing strategies under three objective areas make sense? If not, how could they be improved?
- Is the relationship between ICT transformation and desired government outcomes clear?
- Are there any areas that have not been addressed in the discussion paper which need to be?

How to contribute

Consider the questions in this paper and visit www.getinvolved.qld.gov.au to have your say on this important initiative. You can also submit your comments by emailing ictstrategicsourcing@qld.gov.au.



Service transformation

The transformation of services that could occur over the life of the strategy are outlined in the table below. It is proposed that a timeline for change will be developed as a road map.

Efficient digital services for government

Digital economy strategy

Now	Future	Transformation
Constrained opportunities to implement digitally-enabled economic and social services	Innovative economic and social services made possible by digital technologies	<p>Improved economic growth and development through access to online information</p> <p>Increases in the percentage of households and businesses using online opportunities and services</p> <p>Increased remote access to health specialists for people in remote, rural and outer metropolitan Queensland</p> <p>Increased connectivity of schools, TAFEs and higher education institutions and universities to develop online education services</p> <p>Increased number of Queensland workers with teleworking agreements</p> <p>Reduced gap between households and businesses in major cities with remote areas</p> <p>Reduction in operating costs associated with providing information over the phone or in writing</p>

Digital skills strategy

Now	Future	Transformation
Ad hoc approach to ICT skills development	Plan digital skills and capability development	<p>Potential for greater innovation in business solutions</p> <p>Improvements in Queensland's digital structure</p> <p>Grow Queensland's ICT sector</p>

Cloud services

Now	Future	Transformation
ICT services provided in-house Email services provided by government-owned resources	<p>ICT services provided from a range of sources including managed services and cloud</p> <p>Email services provided by external suppliers</p>	<p>Improved functionality</p> <p>Improved agility</p> <p>Improved scalability</p> <p>Increased predictability in cost structures</p> <p>Decreased complexity in operational and support arrangements</p> <p>Increased commoditisation of the services available from the cloud</p> <p>Improved ability to respond to changing business processes</p>

Contestability and ICT strategic sourcing

Now	Future	Transformation
Agencies have some understanding of their costs and source most services internally	Agencies understand costs and use sourcing strategies to obtain the best value for their agency	Agencies have full understanding of costs and service levels Sourcing strategies used to support reforms Agencies are sophisticated purchasers of ICT services

ICT as a service

Now	Future	Transformation
CIOs more focused on technology management	Digital services officers focused on business solutions	Reduced total cost of ownership for government ICT applications and facilities Increased flexibility in ICT deployment to support business processes Increased alignment between ICT resources and business processes

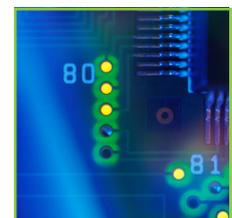
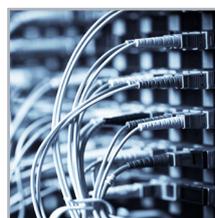
Digitally-aware and competent staff

Workforce transformation

Now	Future	Transformation
Staff profiles and costs are weighted towards managing operations	Staff profiles reflect a focus on business analysis, strategy and planning as well as portfolio management	Focused on business outcomes and delivery Increased understanding of service standards and improved relationships with business and industry

Program and project competency

Now	Future	Transformation
Low maturity program and project capability across government	Executives providing oversight on programs and projects that demonstrate controlled investments	Increased program and project success Increased alignment of ICT projects with business objectives Reduced number of poorly conceived projects Reduced duplication and/or overlapped projects Increase in business benefits realised using fewer resources Increased public confidence in the sector's ability to deliver successful initiatives



Digital services for clients

Digital archiving strategy

Now	Future	Transformation
Limited readiness among government departments for managing digital records	Ongoing access to the critical digital records of government business	<p>Increased effectiveness at managing and preserving public records</p> <p>Reduced in manual overheads associated with managing departmental records</p> <p>Increased accessibility to government records (both born-digital and digitised)</p> <p>Increased reliability of government digital records</p> <p>Increased service continuity for storing, searching and retrieving digital records</p>

Information management

Now	Future	Transformation
Focus on managing technology and applications	Focus on managing information as an asset	<p>Increased understanding of the value of information</p> <p>More open government culture</p> <p>Increased capability to work with policy constraints</p> <p>Enhanced capability to share information</p> <p>Increased value from information sharing</p> <p>Increased visibility and usability of information</p> <p>Enhanced collaboration between government, enterprises and the community</p>

Open data initiative

Now	Future	Transformation
Limited data sharing among government departments and between the government and the community	Data sharing as the rule not the exception	<p>Improved comparative benchmarking enabling greater accountability and transparency of government services</p> <p>Improved public confidence in the Queensland Government's ability to deliver services</p> <p>Improved ease of entry for service providers enabling economic growth</p> <p>Reduced operational and capital costs associated with managing and storing duplicated data</p> <p>Reduced costs to deliver services</p>

Government service delivery and community accessibility strategy – one-stop shop

Now	Future	Transformation
Customers access government through multiple and complicated channels	Customers can access the majority of government services through one website, with the ability to transact online	<p>Delivers efficiencies and savings through optimisation, migration and improvement</p> <p>Reduces duplication of effort through consolidation of channels and solutions</p> <p>Improves customer satisfaction and trust in government</p>

Management framework

In recent years various reports, audits and reviews have identified lessons that should have been learned, but were not. Regular references were made to ineffective governance of programs and projects, to disjointed decision making, poor assessment of business cases and lack of risk and benefits management almost across the board.

Approaches to solving these problems have usually focused on creating committee structures and re-establishing administrative layers, or hierarchy, and largely ignoring best practice approaches like embedded enterprise risk management, portfolio, program and project management, and benefits management.

Likewise, ICT planning has continued to be just that, planning for technology implementations rather than tying ICT ever more closely to business strategy and development.

A proposal is being developed for a new management framework which will bring together the elements described in this strategy, and the ‘at risk’ components of current, or legacy systems.

The management framework will identify a new authorising environment which is proposed to guide the future use of ICT in the government.

Aside from driving cultural and practical change by delivering on the ICT strategy, this proposed management arrangement is intended to provide a mechanism for effectively controlling:

- all Queensland Government departments’ transformational ICT programs and projects
- their significant and ‘at-risk’ ICT assets.

Departments will retain responsibility for delivery of ICT programs and projects and management of ICT assets that are identified as specific line of business, low risk or low value initiatives, although reporting and assurance would still be required.

However all transformational programs and projects would need to be subject to appropriate controls and approvals through the proposed framework.

Transformational programs and projects are described as systemic, organisation-wide, multi-agency or whole-of-government change initiatives that challenge the status quo and involve fundamental changes to strategy, structure, systems and culture.

Most, if not all, transformational programs and projects will be enabled by or delivered through ICT. Where these are identified as at risk or as significant, a higher level of assurance is required.

Criteria for determining levels of assurance required over various programs and projects, and for determining what is 'significant' will likely include:

- the total initiative cost
- the risk to continuity of service delivery, workplace health and safety and investment integrity.

Next steps

Once feedback has been received through the consultation process it will be collated and posted online.

The feedback will be an integral part of developing the final strategy and associated implementation documents.

The strategy and implementation plan will be published following Cabinet's endorsement.

