Information and Communication Technology for Tomorrow’s Queensland

ICT Industry Development Strategy
## Contents

Minister’s foreword .......................................................... 1  
Executive summary ......................................................... 2  
The ICT industry environment ........................................... 4  
  ICT’s contribution to the global and Queensland economies  4  
  Queensland’s ICT industry strengths ............................... 5  
Vision ........................................................................... 6  
Themes, flagship projects and initiatives .............................. 7  
Toward Q2: Tomorrow’s Queensland ................................. 7  
  Theme one: growing industry in a low carbon world ........ 9  
  Theme two: sustaining and creating employment ............. 10  
  Theme three: research and development ......................... 11  
  Theme four: internationalising Queensland’s ICT industry  12  
  Theme five: driving business growth ............................... 13  
  Theme six: regional industry development ....................... 14  
Return on investment ...................................................... 14  
Glossary of assistance programs .................................... 15
Minister’s foreword

The transformational power of Information and Communication Technology (ICT) is undisputed – it is evolving constantly and at a rapid rate. ICT provides great opportunities to deliver services more efficiently and to more people. Increased uptake of ICT across government, business and the broader community is central to the success of the Queensland Government’s Toward Q2: Tomorrow’s Queensland strategy, which is designed to deliver a stronger, smarter, greener economy.

We know that our confidence in Queensland’s ICT industry is well placed. It is driven by creative, innovative and energetic people who share the Queensland Government’s enthusiasm for their industry’s future. They are helping power Queensland as a centre of excellence for high-tech industries in the Asia Pacific region and the broader global digital economy.

The Queensland Government is committed to the ongoing development of the ICT industry in Queensland. Over the four years from 2004-2008, the Government focused primarily on nurturing the ongoing development of the ICT industry through the Smart ICT: Taking it to the World strategy.

Queensland’s new ICT industry development strategy - Information and Communication Technology for Tomorrow's Queensland, seeks to build on the solid foundations of past strategies. Importantly, this strategy aims to reinforce the enabling attributes of ICT for generating employment, economic development and innovation. The new strategy will forge stronger connections between Queensland’s innovative ICT industry and other key industries, the public sector, research organisations, regional economies and communities. As a global industry, this strategy also endeavours to grow our ICT exports through business development initiatives, international collaborations and stronger research linkages.

Additionally, this strategy will deliver a range of best practice programs and initiatives to assist Queensland’s growing ICT industry to take advantage of business opportunities as the world’s economy is reinvented and reshaped. It will also lay the foundations for future growth through initiatives to attract and retain talented, creative and suitably skilled ICT professionals. The ongoing attraction of new investment and venture capital will also be a key priority to drive the growth of the industry and position it well for the future.

Through this strategy, the Queensland Government will continue to work in partnership with the ICT industry to develop stronger and smarter plans to encourage and sustain growth. The successful outcomes from the former Smart ICT: Taking it to the World strategy (2004-2008) were due in no small part to the close links forged between ICT industry associations, the ICT research sector and the Queensland Government.

With this new strategy in place, ICT will continue to assist Queensland’s future prosperity and ensure that our vibrant ICT industry is recognised internationally for providing world-leading solutions.

Andrew Fraser
Treasurer and Minister for Employment and Economic Development
Executive summary

The ICT industry is a truly global industry and Queensland is home to a diverse and vibrant ICT sector that is fast gaining a reputation for its creative and innovative technologies and applications. Its people are part of a quiet revolution that is creating more highly-paid jobs, increasing exports, improving the community’s access to knowledge and services and enabling future prosperity for the State. This Strategy aims to position Queensland’s ICT industry as an active player in the global, digital economy. These transformational capabilities will be further enhanced with the roll-out of the National Broadband Network over the coming years, which will greatly enhance the way industries do business and the delivery of Government services.

International ICT industry analysts Gartner Research estimated that global end-user spending on ICT products and services was approximately $3.4 trillion in 2008 rising to $4 trillion by 2012. In Australia, the ICT industry directly employs approximately 532,000 workers, generating revenues of approximately $98 billion and invests approximately $3.1 billion in research and development1.

According to the Queensland Government’s 2006-2007 survey of the Queensland ICT industry, the local industry comprised an estimated 5,700 businesses, employed a direct workforce of 70,000 and generated revenues of approximately $29 billion and exports of $1.15 billion.

The Queensland Government is strongly committed to the ongoing development of the State’s ICT industry. The Information and Communication Technology for Tomorrow’s Queensland strategy is designed to sell Queensland’s brilliance nationally and internationally, create more jobs and help enable a range of economic, environmental and social benefits across the State and country.

Queensland is not immune from the economic impacts affecting industries globally. However, the Government’s strategic focus in relation to the ICT industry will play a pivotal role in strengthening the Queensland economy during this time. This Strategy recognises the strength of Queensland’s ICT capabilities and how these will help to position our economy to take advantage of business and market opportunities as the world’s economy is rebuilt. In turn, these capabilities will enable other industries to strengthen their organisational structures, improve their products and processes and create more jobs.

Employment, economic growth and prosperity are highly dependent on continued industry development, productivity improvements and capturing opportunities in the global digital economy. Reports commissioned by the Australian Government to determine the productivity gains from adoption of technology by Australian businesses have estimated that a minimum of 35 per cent, and in some circumstances up to 65 per cent, of the economic benefit of innovation in the Australian services sector over the past 15 years was driven by technology – predominantly ICT2. In manufacturing, the technology-related gains were approximately 10 percentage points higher.

In an innovation survey3, the Australian Bureau of Statistics (ABS) reported that ICT skills were the most commonly reported factor (35 per cent) in Australian businesses developing or introducing new goods, services, processes or methods.

A key element of the continued success of ICT industry development in Queensland will be the close partnership between relevant Queensland Government agencies, the ICT industry, industry associations, the tertiary education and training sectors, other government departments and key industry stakeholders.

In particular, the Information and Communication Technology Ministerial Advisory Group (ICTMAG), which incorporates representation from the State’s very diverse ICT sub-sectors, has traditionally provided the Minister responsible for developing the ICT industry with independent

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1 The Whitehorse Report, ICT Industry Survey and Analysis, July 2007
2 DCITA Research Publications; Productivity Growth in Service Industries and Productivity Growth in Australian Manufacturing; 2004
3 ABS: Innovation in Australian Business, 2006-07; Cat. No. 8158.0
Executive summary continued

advice on a broad range of challenges and opportunities relating to the growth and development of the State’s ICT industry. It is anticipated that a reconstituted ICTMAG or a similar model for industry/government consultation will include an opportunity for ongoing input to the implementation of this Strategy and in identifying and advising on emerging industry trends.

The Strategy recognises the growing contribution that ICT plays in helping deliver the Government’s Toward Q2: Tomorrow’s Queensland objectives. The Strategy will also assist Queensland to address the important policy issues relating to technological change and convergence, and how these factors will shape our future capacity for economic and environmental sustainability.

This ICT industry development Strategy also complements the Toward Q2 through ICT, which is the Queensland Government’s strategy for governance, management and procurement of ICT within government developed by the Department of Public Works (DPW). Both these strategies represent an integrated, comprehensive approach to ICT in Queensland. The priorities and targets identified within Toward Q2 through ICT address the government’s recognition that ICT is a key enabler for achieving many of the outcomes the Queensland Government is targeting in Toward Q2: Tomorrow’s Queensland, in responding to the Right to Information report and in enhancing service delivery and engagement of the population into the future.

This Strategy addresses ICT industry development issues through six themes:
1. growing industry in a low carbon world
2. sustaining and creating employment
3. research and development
4. internationalising Queensland’s ICT industry
5. driving business growth
6. regional industry development.

Each theme will be addressed by a series of flagship projects over the life of the strategy. Flagship projects will consist of a number of initiatives, which may be varied over time as market conditions and circumstances change.

Annual action plans of the initiatives to be produced and implemented by the Government and its partners, will form the framework for an industry ecosystem which supports investment attraction, facilitates access to new technologies, provides opportunities for increased international engagement and contributes to the State’s economic growth.

With the ability to transform existing industries and develop new ones, ICT remains one of the most important vehicles to ensure businesses stay competitive now and into the future. Amidst our fast-paced and rapidly evolving world, Queensland’s ICT industry will continue to grow solidly as a result of its strength, diversity, skills and resources. This Strategy will enable the ICT industry to address these challenges and seize business opportunities to help secure growth and prosperity for tomorrow’s Queensland.
The ICT industry environment

ICT’s contribution to the global and Queensland economies

The global digital economy
This Strategy focuses on the pivotal role ICT plays in a twenty-first century economy. ICT enables progress and prosperity. It promotes efficiencies and transformation of commercial and industrial businesses and tools for research and development. It also provides a platform for greater innovation in the delivery of government services such as health, education, transport and emergency services. This Strategy recognises ICT’s key role in expanding Queensland’s engagement in the global digital economy.

The critical role of ICT and broadband technologies in underpinning economic growth and nation building was reflected in the OECD’s Seoul Declaration for the Future of the Internet Economy (June 2008), where member countries agreed that ICT and broadband technologies were “fundamental for economic and social development”.

Accordingly, this Strategy builds upon the capabilities, skills, research and development attributes of the Queensland ICT industry and outlines initiatives to identify and analyse the impact of ICT on the digital economy in relation to job creation and productivity. The results of this work will inform the development of further action during the life of this Strategy.

Australia and Queensland

Gartner Research (leading international ICT industry analysts) estimates global-end-user spending on ICT products and services at approximately $3.4 trillion in 2008 rising to $4 trillion by 2012. Global end-user spending on software and ICT services – sectors in which Australia and Queensland are strong – is estimated to grow from approximately $1 trillion to $1.3 trillion. Total spending in the Asia Pacific region, including Australia, is estimated to grow from $528 billion to $721 billion over the same period.

The Australian ICT industry is comprised of four primary segments. The largest segment is wholesale trade estimated at $51 billion in income, followed by information media and telecommunications with $41 billion, computer services with $26 billion and manufacturing with $4.5 billion. The industry directly employs approximately 532,000 persons.

According to the 2006-2007 Queensland ICT industry survey, the local industry comprised an estimated 5,700 businesses, employed a direct workforce of 70,000, and generated revenues of approximately $29 billion and exports of $1.15 billion.

As the world becomes increasingly aware of, and responsive to the threats posed by climate change, the need for a sustainable environment is elevating green products and services to the centre of business decision making and community planning. This presents strong opportunities for more flexible, competitive industry enabled by smart innovations including ICT.

The ICT industry can and will play a vital role in providing both hardware and software applications for monitoring, measuring, reporting and adapting to the effects of climate change. ICT can also play a pivotal role in climate adaptation strategies such as more flexible working arrangements (i.e. tele-working and mobile computing) and corporate travel (e.g. greater use of video conferencing/tele-presence facilities).

Other powerful and growing technology influencers are at work. Software as a Service (SaaS) (i.e. delivery of software products and services over the internet) is driving the cloud computing phenomenon. Cloud computing has the potential to enable businesses to reduce the cost of data storage and server maintenance: businesses will simply buy them as a service from an external supplier.
The ICT industry environment

Queensland’s ICT industry strengths
Queensland’s ICT industry has identified strengths in a range of specialised software design, applications and ICT services.

Queensland is renowned for its pool of talented software designers, supported by high-quality education and training institutions, which has enabled the industry to deliver world-class ICT products and services to traditional industries such as mining, agriculture and tourism. These include:

- enterprise software
- e-security
- Global Navigation Satellite Technologies (machine guidance)
- remote sensing
- simulation.

The industry has also developed a number of niche capabilities over the last decade. Of particular significance has been the emergence of a critical mass in games development and animation technologies. The Australian Bureau of Statistics report on Digital Game Development Services for 2006-07 identified Queensland as the dominant hub for games development in Australia.

Queensland is also home to a growing number of corporate sector ICT research and development centres, e.g. IBM, Oracle, Red Hat, SAP, Sun Microsystems and Technology One.

Future strengths – the Government’s contribution
Queensland is developing significant, leading-edge ICT research and development (R&D) capacity which will flow through to the industry in the form of new technologies and capabilities. The Queensland Government currently supports three major ICT research institutions being:

- the Australian e-Health Research Centre (AeHRC) – a joint venture between the Queensland Government and the CSIRO ICT Centre (www.aehrc.com)
- the Queensland node of National ICT Australia (NICTA) – focusing on research in the national safety and security arena through its Safe Applications for Emergencies (SAFE) program as well as the complexities arising from the human/computer interface through its Cognitive Organisational Systems Engineering (COSE) program (NICTA | Queensland Research Lab)
- the Queensland Cyber Infrastructure Foundation (QCIF) – a high performance computing network comprised of six of the State’s universities which is used to underpin much of the cutting-edge research conducted within the tertiary sector (http://www.qcif.edu.au/).

Queensland ICT companies and research organisations are able to seek assistance under the Smart Futures Fund (previously, Smart State Innovation Fund), which supports cutting-edge research in the State’s world-class institutes, fosters collaboration, and encourages research critical to meeting Queensland’s future economic, social and environmental challenges.

The Queensland Government continues to support industry development and research linkages through a range of assistance initiatives:

- the Queensland Government Business Information Service
- the Queensland-Wide Innovation Network (Q-WIN), which optimises outcomes from the existing range of innovation and commercialisation services, providing resources and facilitation linkages for the network across Queensland http://science.qld.gov.au/dsdweb/v4/apps/web/content.cfm?id=13654

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9 ABS: Digital Game Development Services, 2006-07; Cat. No. 8515.0
10* Please see Glossary for detail
Information and Communication Technology for Tomorrow’s Queensland

ICT Industry Development Strategy

The ICT industry environment

- the Business and Industry Transformation Grants
- the Indigenous Business Development Grants program
- the Australian Institute for Commercialisation (co-funded by the Government).

Significant benefits will flow from leveraging this position of strength to drive the development and adoption of new technologies, applications and solutions within the target sectors of this Strategy and beyond.

The way forward

The ICT Industry Development Strategy will influence policies, implement initiatives and facilitate industry-based activities that enhance the size and sustainability of the State’s ICT industry. Additionally, it will drive improvements in productivity and efficiency across non-ICT and Government sectors.

The primary focus of this strategy is on ICT’s capacity to enhance productivity and competitiveness in other industry sectors and the broader economy. The Driving Business Growth initiatives will be critical to fostering innovation in government and business, and in particular those businesses in Queensland’s priority industry sectors. Closely linked to this theme will be initiatives that are focused on sustaining and creating employment both in the ICT industry and the broader economy.

The Strategy also recognises key leverage points for the ICT industry that will be pivotal to its growth over the next three years. Growing Industry in a Low Carbon World will present many opportunities as well as challenges for the industry which will be supported through a series of initiatives. Ongoing support for the Internationalisation of Queensland’s ICT Industry is important for small-to-medium enterprises (SMEs) to successfully operate in a global marketplace. The Queensland Government will continue to invest in the State’s ICT Research and Development (R&D) infrastructure. This Strategy will seek to build on the public and private investment in R&D to achieve profitable commercial outcomes for the industry.

To highlight the ongoing commitment and importance of the development of regions to the growth of Queensland, a series of initiatives have been identified that support the development of the ICT industry and other strategic priority sectors in regional Queensland.

Vision

“ICT will underpin the transformation of the Queensland economy to one where knowledge, creativity and innovation drive economic development for the benefit of all Queenslanders”
The ICT industry environment

Themes, flagship projects and initiatives
The Strategy will focus on six themes over its three year term. Initially, eight flagship projects will be implemented across the six themes, but others may be added over the life of the Strategy. Each flagship project will consist of a series of initiatives. Action plans to implement the initiatives will be published on an annual basis.

Following sections describe the themes, flagship projects and initiatives.

Diagram one: Structure of the strategy

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<tr>
<th>Themes</th>
<th>Flagship projects</th>
<th>Initiatives</th>
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<td>Annual Action Plans</td>
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Toward Q2: Tomorrow’s Queensland
The previous ICT strategy focused on assisting the local ICT industry to reach a level of maturity. This new Strategy seeks to build important links with other strategies and programs, in particular, the Queensland Government’s Smart Industry Policy (SIP), the Queensland Government Chief Information Office (Queensland Government ICT Strategy), Trade Queensland (Driving Export Growth for Queensland Strategy, 2006-2011), the Office of Climate Change (ClimateSmart 2050), Queensland Health (Queensland Health e-health Strategy), Queensland Transport (Traffic Congestion Strategy) and the Department of Education and Training (Queensland Skills Strategy).

This Strategy outlines initiatives that will directly contribute to the Government’s Toward Q2 objectives by:

- supporting the growth of Queensland ICT companies and attracting new investment from companies that will enhance the ICT sector’s global linkages and supply chain
- encouraging and facilitating access to, and the uptake of, new technologies across the economy
- building the capacity of the ICT industry to engage with international markets, technologies and partners
- contributing to economic growth and job creation across the State.

This Strategy primarily addresses the following three Toward Q2: Tomorrow’s Queensland strategy objectives, with consequential benefits for the remaining objectives (i.e. healthy and fair).

<table>
<thead>
<tr>
<th>Toward Q2 objectives</th>
<th>Strategic contributions</th>
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| **STRONG**           | • Identify and network existing public and private ICT R&D infrastructure  
                       • Assist firms to develop and benefit from international partnerships and alliances, and improve the awareness and receptivity of Queensland’s traditional and emerging industries to the innovative use of ICT |
| **GREEN**            | • Focus on those aspects of climate change that relate to maximising industry development opportunities and the contribution of the ICT and Clean Technology industries to Queensland’s future economic and environmental sustainability |
| **SMART**            | • Link education, skills and training to employment opportunities resulting from innovation and productivity improvements driven by new technologies  
                       • Attract talented students into secondary and tertiary ICT education and retain employees in the industry to grow Queensland’s business and research capability |
The ICT industry environment

**Smart Industry Policy**
The Smart Industry Policy is the Government’s primary industry development policy vehicle for achieving the objectives and aspirations of the *Toward Q2* strategy.

This new ICT industry development strategy represents a continuation of the government’s commitment to deliver dedicated support as outlined in the Smart Industry Policy. It is focused on extending the reach of ICT solutions across the economy. Consistent with the Smart Industry Policy framework, through its six themes, this ICT industry development strategy will deliver targeted projects and initiatives to enhance the productivity and capacity of the ICT industry specifically and the Queensland economy generally.

**Whole-of-Government**
This Strategy delivers a comprehensive suite of industry development initiatives to maximise the role of ICT in Queensland’s economic and social future, in particular, delivering on the targets and aspirations of the Government’s *Toward Q2* strategy.

This Strategy also recognises the role of government in supporting the growth of both the ICT industry and the broader economy. The adoption of ICT goods and services by government and industry will lead to improved productivity, drive innovation and reduce costs.

This Strategy is consistent with and complementary to the *Toward Q2 through ICT* strategy, developed by the Department of Public Works (DPW), which addresses the governance, procurement and utilisation of ICT within government. The two strategies align on potential industry development opportunities.

In particular, DEEDI and the DPW play leadership roles along with other agencies having ICT solution implementation responsibilities, to support SMEs access to the government market place through a range of programs. These include the *ICT SME Participation Scheme* and the *Presentations to Queensland Government Agencies Program*. 
The ICT industry environment

Target technologies and capabilities
This Strategy continues to support the existing capabilities and market strengths of Queensland’s ICT industry including advanced software design and ICT services.

ICT also plays a key role in the competitiveness and productivity of Queensland’s traditional industries including mining, manufacturing, agriculture and tourism.

Accordingly, this Strategy has a strong focus on initiatives to promote the uptake of ICT business solutions in the Queensland Government’s priority industries.

It is also important that the Strategy is flexible enough to accommodate the changing landscape of ICT and broader technological developments.

The following list represents a range of emerging ICT technologies and capabilities which have potential for growth in Queensland:
- simulation and modelling
- sensing and robotics
- interactive digital content industry (the emerging future in games development)
- wireless
- mobility
- open source
- software as a service
- broadband
- cloud computing and virtualisation.

It should be noted that this list of technologies/capabilities is not exhaustive and annual action plans and initiatives will reflect contemporary industry conditions and opportunities for these emerging sectors.

Theme one: growing industry in a low carbon world
The objectives of this theme aim to build knowledge and capability within the State’s ICT industry to reduce its own carbon footprint, and to raise awareness and encourage the uptake of Queensland ICT eco-friendly solutions by Queensland Government agencies, local government and businesses.

This theme focuses on mitigation of, and adaptation to, those aspects of climate change that relate to maximising industry development opportunities and the contribution the ICT industry is making to strengthening Queensland’s future economic and environmental sustainability.

Flagship project: smart ICT solutions for climate change
This flagship project will implement a range of initiatives to increase business and government awareness of ICT as a tool for reducing the State’s greenhouse gas emissions through reduced energy consumption and motor vehicle usage.

<table>
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<th>Initiatives</th>
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<tr>
<td>Promote Queensland ICT technologies to priority industry sectors through case studies and at targeted industry events</td>
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<tr>
<td>Showcase Queensland ICT solutions to Government agencies via the Queensland Government Chief Information Office and CITEC</td>
</tr>
<tr>
<td>Implement a Cleantech Enterprise Pipeline by raising the business and commercialisation skills in emerging Cleantech ICT firms and making the investment community and major end-user industries more aware of opportunities through information seminars and events</td>
</tr>
<tr>
<td>Assist the ICT industry to minimise its environmental footprint, and that of other industries, by promoting the environmental and financial benefits of managing energy more efficiently and minimising waste streams</td>
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<tr>
<td>Leverage ICT industry development opportunities flowing from the Queensland Government’s new $15 million Climate Smart Business Service to begin in July 2010, assisting small-to-medium sized business to access a range of advice and assistance to lower their greenhouse gas emissions</td>
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<tr>
<td>Support the promotion of ICT-based green solutions such as intelligent transport systems to reduce congestion and solutions for improved e-government service delivery</td>
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The ICT industry environment

Theme two: sustaining and creating employment

- The Queensland Government, in the 2009 election, committed to creating 100,000 new jobs over the next three years. Initiatives under this and other themes in the Strategy collectively contribute to the ICT industry’s role in meeting this target:
  - demonstrating the broader employment benefits of implementing ICT business solutions as a key element of creating employment across the economy
  - promoting a co-ordinated approach between the ICT industry, Government and the education and training sectors to meet future workforce needs
  - raising the profile of ICT as an attractive and diverse career path in order to attract, train and build an ICT-capable workforce which will help transform and strengthen the economy and create new jobs into the future
  - building the entrepreneurial and business skills of the Queensland ICT industry to assist it to diversify and grow, increasing direct jobs in the sector
  - attracting new ICT projects and organisations to Queensland in order to continue to strengthen and deepen the industry so that it creates sustainable jobs

Flagship project one: smart jobs project

This flagship project has the short-to-medium-term aim of creating jobs across the economy utilising the enabling capacity of ICT applications. It will include gathering initial quantitative and qualitative data to establish the link between investment in ICT applications and job creation, and subject to the analysis of that data, formulating an employment creation initiative.

Initiatives

- Gather and analyse relevant data relating to the impact of ICT on employment and productivity to ensure appropriate and timely policy responses
- Based on the results of the analysis of the data, develop and implement appropriate employment related initiatives

Flagship project two: ICT studies and careers advancement strategy

This flagship project focuses, in the medium-term, on a coordinated partnership between the ICT industry, ICT industry associations, secondary and tertiary education sectors and key Queensland Government agencies to promote ICT as an exciting, stimulating and highly rewarding career option.

Initiatives

- Support the ICT industry to implement a dynamic ICT Studies and Careers Advancement Strategy that will include an industry information portal, and will attract fresh, bright and talented minds into the ICT industry in Queensland
- Facilitating and supporting the ICT industry’s Skills Leaders’ Group in promoting the benefits and opportunities available in ICT careers
- Develop and adopt a Universal ICT Careers Framework to provide clear progression paths for ICT workers, portability of skills and contemporary education and skills courses
- Support the effectiveness of the Government’s election commitment to provide more than 148,000 extra training places across all industries by promoting the greater uptake of available tertiary education and workforce training incentives such as scholarships, cadetships and internships
Theme three: research and development

This theme acknowledges the importance of support for early-stage R&D through to product commercialisation to ensure Queensland is able to retain and attract world-class researchers and position the State on an international level. It is also important that closer commercial linkages are forged between the research sector, the ICT industry and individual firms to ensure that existing commercial support, such as the Australian Institute for Commercialisation’s Smart Industry Toolbox and the Queensland-Wide Innovation Network’s (Q-WIN) Innovation Coaches are promoted and utilised.

R&D provides the foundation for the advancement of all ICT products and services from concept to commercialisation, and contributes directly to the launch of new products and services to meet the demands of a rapidly changing market.

Flagship project: ICT innovation ecosystem project

This flagship project will map and better leverage elements of the ICT innovation ecosystem including public and private ICT R&D entities, Queensland’s commercialisation and investment infrastructure, product/technology testing sites and technology incubators.

The Innovation Ecosystem Project will allow SMEs to develop and showcase their products and services in public, private and multinational commercial environments. It will also assist Queensland’s ICT firms to attract investment and venture capital, and to increase their investment in R&D, in close collaboration with Invest Queensland and other agencies.

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<th>Initiatives</th>
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<tr>
<td>• Undertake an initial mapping study to identify all aspects of the ICT innovation ecosystem to explore models (both virtual &amp; physical) to enhance interactions within the ecosystem</td>
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<tr>
<td>• Promote the importance of R&amp;D to ICT industry development and create platforms for increased collaboration between identified industry players (large and small) and facilities in the ICT innovation ecosystem</td>
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<tr>
<td>• Conduct workshops and forums for local ICT SMEs to raise the awareness of public and private sector ICT R&amp;D facilities, researchers and emerging technologies</td>
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<tr>
<td>• Arrange opportunities for highly innovative ICT SMEs to pitch their credentials to multinationals and the public sector to attract investment and venture capital into the industry</td>
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<tr>
<td>• Establish an internet portal to highlight Queensland’s ICT innovation ecosystem and the various public and private sector players</td>
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<tr>
<td>• Support key ICT research centres including the Australian e-Health Research Centre (AeHRC), the Queensland node of National ICT Australia (NICTA), the Queensland Cyber Infrastructure Foundation (QCIF) and their active involvement in the ICT R&amp;D Innovation Ecosystem</td>
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<tr>
<td>• Encourage and support applications to Queensland Government funding programs</td>
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<tr>
<td>• Leverage Australian Government funds through promoting its ICT R&amp;D assistance initiatives such as the Super Science and Education Investment Funds and the Tax Rebate System</td>
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<tr>
<td>• Undertake targeted research on emerging ICT trends</td>
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The ICT industry environment

Theme four: internationalising Queensland’s ICT industry
This theme pursues the benefits that can be achieved by assisting both mature and emerging ICT businesses to take advantage of international market opportunities and to accelerate the internationalisation of their intellectual property and their client base. In order to participate effectively and sustain their presence in the global ICT market, firms need assistance to develop their international business and marketing skills and access to quality market intelligence and relevant contacts. The ICT industry is also recognised as a “smart export sector” in the Driving Export Growth for Queensland 2006-2011 strategy.

Internationalising Queensland’s ICT Industry is critical to Queensland’s future prosperity and competitiveness. Firms that are internationally competitive are more likely to increase revenues, create highly-paid, high-skilled jobs, repatriate wealth and thrive in the face of import competition.

Flagship project: enabling technology internationalisation program
This flagship project will enhance the business skills and networks of Queensland ICT firms to help them identify and capture key customers in national and international markets. It will assist firms that are currently exploring international partnerships to move to the next level and help emerging firms develop and benefit from international partnerships and alliances.

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<tr>
<td>• Identify and assess priority export markets and related initiatives as part of the annual review of the Action Plan</td>
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<tr>
<td>• Assess options to assist ICT SMEs establish a foothold in priority overseas markets by facilitating their access to temporary in-market office facilities</td>
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<td>• Identify opportunities for international alliances, including arranging expert exchanges/forums via government to government and other agreements</td>
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<tr>
<td>• Showcase Queensland’s ICT technology capabilities and identify opportunities for Queensland to participate in world standard international events, such as the Australian Computer Society’s hosting of the World Computer Congress on ICT in 2010</td>
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<tr>
<td>• Conduct market research to identify export and investment attraction opportunities and potential niche markets</td>
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<tr>
<td>• Promote existing Queensland and other Government export programs such as Getting Export Smart, Export Masterclass, Mentoring 4 Export and Austrade programs and services to emerging ICT exporters, including the Export Market Development Grants and the International Business Cadetship program</td>
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The ICT industry environment

**Theme five: driving business growth**
This theme seeks to harness and grow the enabling and transformational potential of the ICT industry to drive improved productivity and increase employment across Queensland’s industries. It will provide opportunities for local ICT firms to showcase their innovative products and services to potential customer organisations both in Queensland and nationally at major industry events. This theme also seeks to build stronger links between Queensland Government agencies and the ICT industry to increase the innovative use of ICT within government to improve productivity, drive innovation and reduce costs.

**Flagship project one: enabling technologies uptake program**
This flagship project will increase the awareness and adoption of technology-based solutions by non-ICT industries across the economy and government. Its focus will be on those ICT-based systems and practices which can improve production processes and business systems. It will also assist ICT firms to commercialise their intellectual property and provide new, smart solutions to the market.

**Initiatives**
- Host ICT Factor events and develop publications such as capability directories to showcase innovative ICT firms and their solutions to target non-ICT sectors and follow-up on events to measure the impact of these events
- Identify and link niche ICT firms and researchers with the Department’s R&D Forums and Tech Clinics programs
- Partner with ICT industry associations and other industry development organisations to provide business skills development, mentoring, coaching and business advisory services to ICT SMEs
- Implement an ICT Industry Assistance Roadmap to provide a comprehensive guide to available assistance programs for the ICT industry across all Government levels, including R&D funding assistance under the Smart Futures Fund, the Smart Industry Toolbox and Q-Win Network Innovation Coaches
- Deliver mentoring, coaching and support services to targeted firms to accelerate the transfer of knowledge across industry sectors

**Flagship project two: Government ICT uptake project**
This flagship project will focus on promoting and encouraging the uptake of ICT solutions to improve productivity, drive innovation and reduce costs across Government agencies.

**Initiatives**
- Host Partners in Technology briefings to inform the Queensland ICT industry of ICT infrastructure and forward procurement plans of state government agencies and other major end-user organisations in Queensland
- Improve processes for Queensland ICT SMEs to access Queensland Government ICT procurement regulations
- Promote other government agency initiatives that have an ICT industry development focus, including the Presentations to QLD Government Agencies Program (DPW) and Queensland Health’s e-Health Strategy
Theme six: regional industry development
This theme aims to ensure that regional Queensland businesses have access to the skills, resources and alliances that will enable them to adopt ICT-led productivity improvements. It also focuses on strengthening the capacity of regional ICT firms to support local businesses in the use and uptake of emerging technologies.

This theme will link with other government initiatives for regional Queensland, including the Blueprint for the Bush - a 10 year plan to work with rural and remote communities to secure a sustainable future.

Flagship project: regional access program
This flagship project will focus on developing and promoting innovative, regionally-based enabling technologies for use by government and industry. Its initiatives are directed at increasing investment in, and demand for, the uptake and use by industry and government of these technologies. The regional focus of this flagship project will also broaden the reach and impact of broadband infrastructure and services in regional Queensland to support the increased participation of firms in the digital economy.

Initiatives

- Host regional ICT Factor events to showcase innovative regional ICT firms and their solutions to target non-ICT sectors
- Promote initiatives and attract investment to retain/ attract skilled ICT workers to regional areas
- Promote the capabilities of regional ICT companies to increase demand for their products and services
- Deliver Partners in Technology briefings with a targeted regional focus to inform the local ICT industry of the forward procurement plans of key Queensland Government agencies and local governments
- Deliver regional business development workshops/ seminars to build the knowledge and skills of regional ICT firms to enter into successful business partnerships
- Support broadband network and application uptake through project identification, seminars and networking events
- Attract Australian Government funding and manage broadband and other digital economy projects in regional Queensland
- Contribute to the formulation of State telecommunication policies and the national policy and regulatory agenda

Return on investment
By 2012 the Strategy will:
Support the Queensland Government’s election commitment to create 100,000 jobs by:
- aiming to increase ICT-related employment by 15,000 jobs
- stimulating economic viability and minimising the impacts of the global financial crisis
- increasing ICT skill levels and career development capabilities (activity measure)
- assisting Queensland’s ICT industry by contributing to the Toward Q2 50 per cent increase in R&D across all industries by 2020.
- Increase Queensland’s ICT exports by $400M (outcome measure).

Assist in achieving the Government’s Toward Q2 climate change goal (of cutting carbon emissions by one third by 2020) by:
- increasing the proportion of Queensland ICT firms (by 50 per cent over the 2006/7 level) that have products in the market place designed to assist other businesses operate in an environmentally responsible way or reduce carbon emissions (outcome measure)
- increasing the proportion of Queensland ICT firms (by 50 per cent over the 2006/7 level) that have internal systems in place designed to reduce carbon emissions (outcome measure)
- assisting more local ICT firms to successfully access ICT procurement opportunities (outcome measure).

Progress of the Strategy will be measured and evaluated on an annual financial year basis as part of the development of the Annual Action Plans, which will reflect contemporary business, industry and economic conditions.
Glossary of assistance programs

**Australian Institute for Commercialisation (AIC)**
http://www.ausicom.com
The Australian Institute for Commercialisation (AIC) provides innovation and collaboration services that help organisations grow. Nationally, the AIC works with entrepreneurs, businesses, research organisations and governments to identify opportunities to convert ideas or intellectual property into successful business outcomes.

**Blueprint for the Bush**
Blueprint for the Bush is a 10-year partnership plan between the Queensland Government, AgForce and the Local Government Association of Queensland to foster and support sustainable, liveable and prosperous rural communities in Queensland.

**Business and Industry Transformation Incentive (BITI) Grants**
The Queensland Government’s BITI grants are available for businesses to undertake projects that will promote transformation in priority industries. Incentives are available for progressive businesses with significant growth potential within Queensland.

**ClimateSmart 2050 (Office of Climate Change)**
http://www.thepremier.qld.gov.au/initiatives/climate_change/index.aspx#ClimateSmart
The Queensland Government Strategy, ClimateSmart 2050, was released in June 2007. It establishes Queensland’s long-term goals and provides a platform for the government, community and industry to move to a low-carbon future.

**e-Health Strategy (Queensland Health)**
In early 2008, Australian Health Ministers, through the Australian Health Ministers’ Advisory Council, commissioned Deloitte to develop a national strategic framework and plan to guide coordination and collaboration in eHealth. After consultation across Queensland Health (QH), a public document was developed by Deloitte for informing the Department’s eHealth Strategy.

**Export Market Development Grant**
The Export Market Development Grants scheme is a key Australian Government financial assistance program for aspiring and current exporters. It encourages small and medium-sized Australian businesses to develop export markets by reimbursing up to 50 per cent of eligible export promotion expenses above a threshold of $10,000. The scheme is administered by Austrade.

**Getting Export Smart**
Getting Export Smart is a series of hands-on export skills development workshops designed to help new exporters achieve their full export potential through practical knowledge of export planning and processes. Topics covered include market research, developing export plans, export logistics, introduction to e-business for exporting and international finance.

**ICT SME Participation Scheme**
The ICT SME Participation Scheme is a requirement for Queensland Government procurement of information and communication technology (ICT) products and services. The scheme aims to help ICT small to medium enterprises (SMEs) gain greater access to the Queensland Government market.

**Indigenous Business Development Grants program**
The grant scheme was established to help Indigenous people to increase their economic independence, create employment opportunities and to increase participation of Indigenous people in the economy.

**Innovation Coaches (Q-WIN)**
The Queensland-Wide Innovation Network (Q-WIN) integrates and enhances existing innovation and commercialisation services, providing resources and facilitation linkages for the network across Queensland. Dedicated Innovation Coaches work with clients in partnership with the Department of Employment, Economic Development and Innovation.

**Mentoring for Growth**
Mentoring for Growth (M4G) is a panel mentoring process delivered by the Department of Employment, Economic Development and Innovation with the support of private sector business mentors.

**Mentoring for Investment**
Mentoring for Investment (M4I) assists businesses that have engaged in the M4G process to become investment ready in order to actively seek external capital. During M4I panel meetings mentees present their investment attraction proposals to a panel of investment industry mentors for critique and suggestions before presenting to potential investors.
Glossary of assistance programs continued

Mentoring for Export
Mentoring for Export (M4E) is a panel mentoring process delivered by the Department of Employment, Economic Development and Innovation with the support of private sector business mentors. M4E assists export ready businesses and existing exporters to overcome export related issues and is delivered in partnership with the regional centre network, Trade Queensland, with support from export facilitation agencies and specialists.

National Collaborative Research Infrastructure Strategy (NCRIS)
Through NCRIS the Australian Government is implementing a strategic and collaborative approach to investment in world-class research facilities, networks and infrastructure that are accessible to researchers and meet their long-term needs.

Partners in Technology
Partners in Technology briefing sessions, held by the ICT sectoral development unit within DEEDI, in conjunction with industry, feature various agencies at State and Local levels presenting their ICT forward procurement plans.

Presentations to Queensland Government Agencies program (DPW)
The Queensland Government Chief Information Office (QGCIO) facilitates ICT Industry Presentations to Queensland Government agencies. The QGCIO has developed a simple application process for ICT suppliers wishing to promote their products, services or emerging technologies, or outline ICT best practice to Queensland Government agencies.

Queensland Government Business Information Service
The Government Business Information Service (GOBIS) connects business with government services and programs designed to help you get the best from your enterprise.

Queensland Skills Strategy (Department of Education and Training)
The Queensland Skills Plan 2008 outlines the short and long term measures the Queensland Government will take to alleviate skill shortages at all occupational levels.

Queensland-Wide Innovation Network (Q-WIN)
The Queensland-Wide Innovation Network (Q-WIN) integrates and enhances existing innovation and commercialisation services, providing resources and facilitation linkages for the network across Queensland.

R&D Forums and Tech Clinics
The ICT sectoral development team, within DEEDI, will participate in a series of Research and Development (R&D) forums and Tech Clinic programs. The aim of these is to bring together university and industry stakeholders involved in ICT R&D in Queensland to enhance links and collaboration.

New Queensland Government Toward Q2 through ICT Strategy (Department of Public Works)
Toward Q2 through ICT is the Queensland Government’s five year strategy for government ICT. The priorities and targets identified within Toward Q2 through ICT address the government's recognition that ICT is a key enabler for achieving many of the outcomes the Queensland Government is targeting in Toward Q2: Tomorrow’s Queensland; in responding to the Right to Information report; and in enhancing service delivery and engagement of the population into the future.

Smart Futures Fund
The Smart Futures Fund is a reinvigoration of the Smart State Innovation Funds. It is focussed on supporting researchers in our world-class research institutes, furthering collaboration and the application of research in industry, government, and the community to lift economic, social and environmental outcomes. The Smart Futures Fund will be a shift away from infrastructure investment and a shift towards projects and people. This will further the results already gained by the Smart State Innovation Funds.

Smart Industry Toolbox Program (AIC)
http://www.innovationtoolbox.com.au
An integrated suite of specialised services to assist businesses across a full range of activities including access to research and development, latest business practices, financiers and investors. The Smart Industry Toolbox brings together innovation support services provided by the Queensland Government and its Partner Organisations.

Toward Q2: Tomorrow’s Queensland
The Queensland Government has set goals in the following five theme areas that address current and future challenges for Queensland: Strong Queensland, Green Queensland, Smart Queensland, Healthy Queensland, and Fair Queensland. Within each of these areas are long-term targets to be achieved by 2020.
With a statewide network of Department of Employment, Economic Development and Innovation centres, use the contacts below to find one near you.

1300 363 711 (Interstate callers • 07 3001 6359)
www.ict.industry.qld.gov.au