



Queensland Telecommunications Strategic Framework 2009 - 2012

Version 1.0
November 2008

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1 Introduction

Telecommunications underpins the delivery of Government activities, the operation of economy and day-to-day social interactions.

There is an increasing expectation that telecommunications and the services it supports will be available when and where they are needed, through any convenient means.

Across the economy, there are pressures on being more efficient - *'by doing more with less'*.

There are also expectations that telecommunications will be available to maintain the fabric of society in times of disaster and that government will be there to provide an appropriate and timely response.

In a modern society telecommunications underpins many of the fundamentals of life and the ongoing development of the State of Queensland.

The Queensland Government's Smart State agenda seeks to strengthen and broaden the Queensland economy by encouraging development of knowledge-intensive and value-adding industries, while enhancing the competitive nature of its traditional industry sectors such as mining, manufacturing, construction and agriculture.

1.1 The Smart State Vision for Telecommunications

The Smart State vision for telecommunications is:

a 'Connected Queensland' where Queenslanders use world-class telecommunications services from any location in the State.

1.2 Convergence

Traditionally, telecommunications services have been categorised into four key services¹:

- fixed voice services (telephone);
- mobile voice and data services (including mobile radio);
- fixed data services (eg. Internet, corporate data networks); and
- content services (eg. radio, television, media and interactive games).

In many cases, these services are delivered via physically separate networks. As the information economy evolves and the underlying networks converge, the distinction between these forms of communication will become increasingly blurred. For example, mobile phones now serve as Internet browsers and the Internet now provides fixed voice telephone services and delivers television and radio content.

Convergence means that all content forms, including video, voice, radio and internet services, can be delivered through a common and integrated telecommunications infrastructure.

Use of this converged infrastructure increases flexibility, reduce costs and improves efficiency and effectiveness. As a result of these benefits, convergence also provides an opportunity to build resilience into the network to ensure it is available when it is needed.

Convergence provides an opportunity to consider *'how we can do things better'*.

¹http://www.qgcio.qld.gov.au/01_strategies/qtsf.htm

1.3 Building on the basics

The Queensland Government considers that:

- Standard Telephone Service (STS) functionality should be retained irrespective of how it is delivered.

The Queensland Government Submission to the Australian Government on “Policy and Funding Initiatives to provide Enhanced Broadband to Rural and Remote Areas” contains a list of the STS measures that should be retained².

- Mobile phone services will approach adequacy when all bounded localities³, national highways and state strategic roads have mobile coverage, with the same functionality available throughout the network. Also affordable satellite phone services should be available where there is no terrestrial coverage.
- a definition of broadband Service adequacy should include:
 - an ability for broadband services to carry a wide range of digital content, including Interactive imaging⁴;
 - symmetrical broadband; and
 - maintaining, and improving, on parity with the best 25% of Organisation for Economic Co-operation and Development (OECD) countries in terms of performance and affordability.

The Queensland Government Submission to the Australian Government defines its requirements for the National Broadband Network⁵.

In summary:

The NBN needs to service:

- population centres in Western Queensland, not just those centres within a few hundred kilometres of the coast;
- all bounded localities and hub towns⁶;
- every school, health, public safety facility (i.e. police, ambulance, SES and Fire services) and tertiary education campuses in Queensland; and
- all state and local government libraries.

The proportion of the population that does not benefit from the National Broadband Network (NBN) should receive broadband services that are no less than 75% of the capacity and speed of that offered by NBN provider(s) for terrestrial-based services, and no less than 25% for satellite base services.

There should be no substantial difference in the availability and service quality received by Queenslanders.

Should the NBN offer improved services overtime this should be reflected in the services available to the non-NBN customers.

As a general principle the cost of broadband services need to be functionality based, rather than determined by the delivery technology.

² http://www.ggcio.qld.gov.au/00_pdf/nbn_rural_remote_areas.pdf

³ Population centres of at least 200 people

⁴ This includes interactive real time applications such as gaming and high quality videoconferencing.

⁵ http://www.ggcio.qld.gov.au/00_pdf/nbn_rural_remote_areas.pdf

⁶ A hub township is a small rural township offering both residents (and businesses) of the township and outlying areas access to core services. These core services include one or any combination of; a police presence, school, library, shopping and light industry, post office or agency, fuel depot, significant tourist attraction or major road intersection. Their function is convenience, social amenity and service level and as such its importance is beyond the simple consideration of the resident township population. Examples of these types of towns are Carnavon Gorge, Rolleston and Rubyvale.

1.4 Role of Governments

Constitutionally, the Australian Government is responsible for telecommunications⁷. However, the Queensland Government has, and will continue to use:

- its influence to ensure the Australian Government programs are implemented in a way that provides maximum benefit to Queensland; and
- its telecommunications expenditure, through state procurement processes, to improve the quality and distribution of private sector telecommunications in Queensland.

Queensland Government Owned Corporations (GOCs) may, as part of their commercial business practices, work with private sector telecommunications providers to use existing telecommunications capacity and assets for the benefit of Queensland.

1.5 Relationship to other Strategies and Frameworks

This Framework is one of a number of state-wide frameworks which have been recently released or are under development. Taken together, these frameworks present a comprehensive and interrelated set of approaches through which the Queensland Government will address its priorities for Queensland. These approaches provide a context for local governments, industry, the community and other key stakeholders to develop their own complementary implementation and action plans.

This framework complements current Australian Government policies and focuses on telecommunications and the supporting mechanisms needed to achieve the widespread benefits of innovation in the Digital Age.

Some of the current frameworks include:

- Toward Q2: Tomorrow's Queensland⁸
- Sparse State – Death of Distance⁹
- Review of ICT Governance in the Queensland Government¹⁰
- Smart State Strategy¹¹
- Framework for the collaborative development and use of broadband in Australia.
- Smart Directions Statement 2

2 The Strategies

In order to progress the vision for telecommunications, five strategies have been formulated, and each strategy is supported by a number of actions.

These strategies are:

1. Leadership
2. Digital Content and Applications
3. Business Continuity and Community Confidence
4. Building Capacity
5. Sustainable Policy Directions

⁷ http://www.smartstate.qld.gov.au/resources/publications/ss_strategy/economyv.shtm

⁸ <http://www.towardq2.qld.gov.au/tomorrow/index.aspx>

⁹ http://www.smartstate.qld.gov.au/resources/publications/ss_council/The_death_of_distance.doc

¹⁰ http://www.sdpc.qld.gov.au/sdpc/reviews/review_ict.shtm

¹¹ http://www.smartstate.qld.gov.au/strategy/strategy05_15/index.shtm

Strategy 1: Leadership:

The Queensland Government will adopt a leadership role in the use of telecommunications for service delivery improvements and continuous productivity gains.

Policy Objectives:

- Drive improved coordination and integration of Government Information Technology and Telecommunications for the benefit of the Government and the public.
- Minimise the Queensland Government's telecommunications related carbon footprint.
- Seek to address Government priorities and emerging issues with smart telecommunications.

Priority Actions:

1. Support government accountability through improved access to government information and decisions.
2. Implement e-Health and e-Learning strategies to improve health and learning outcomes particularly in non-metropolitan areas
3. Consolidating the management responsibility and accountability for infrastructure, networks and data centre services across the Government.
4. Assist agencies in the development of appropriate broadband enabled service delivery strategies, including Internet delivery and the extension of Smart Service Queensland (eg Web-2).
5. Support the development and implementation of appropriate Queensland whole-of-Government ICT architectures and standards to facilitate the progressive migration to a converged whole-of-Government voice and data environment.
6. Utilise GovNet and other shared Government ICT infrastructure (including Identity, Directory and Email Services) to provide enhanced features and functionality to improve productivity, customer service delivery and support whole-of-Government ICT initiatives.
7. Support the use of geospatial and other large data types to improve government operations and decision making.
8. Develop a Queensland Government Information Security Strategy which supports effective communication between the Public, government agencies and their business partners.
9. Ensure cross agency telecommunications projects are coordinated, well managed and align with Government priorities.
10. Support the use of modelling and simulation to improve Government decision making.
11. Explore and develop ICT technologies to contribute to a low carbon world through reduced industry carbon footprint.

Strategy 2: Digital Content and Applications:

All Queenslanders will be able to benefit from the transformational nature of digital content for economic development, quality of life, and leisure activities.

Policy Objectives:

- Grow Queensland's capability to adapt and develop digital content and concepts.
- Address social inclusion and ubiquity of telecommunications.
- Partner with the private sector to improve collaboration and information sharing.

Priority Actions:

1. Continue to support the development of Queensland ICT and related creative industries, such as computer games, film and television production, animation and music.
2. Encourage activities such as the digitisation of cultural collections at local government and community levels to build community capacity and grow demand for broadband infrastructure.
3. Partner with the Australian Government and other stakeholders to develop policies and programs to improve the access to and availability of ICT services in indigenous and remote communities.
4. Actively promote the availability and community use of relevant Australian Government telecommunications initiatives.

Strategy 3: Business Continuity and Community Confidence:

Queensland will have telecommunications infrastructure and services that meets community expectation and maintains business and social confidence in times of crisis.

Policy Objectives:

- Ensure telecommunications services meet the expectations of government, business and community sectors in crisis situations.

Priority Actions:

1. Continue the development and testing of business continuity plans that enable government, business and community sectors to respond to local and global threats.
2. Maintain state telecommunications facilities with the capacity and capability to support all emergency service demands, with:
 - prioritisation of network services cascading from Police, Emergency Services to other critical services;
 - high levels of redundancy and resilience; and
 - legislative and contractual arrangements that support cross and inter jurisdictional operations.

Strategy 4: Building Capacity:

Queensland will have the capacity to develop and grow in a global knowledge economy.

Policy Objectives

- Minimise regional barriers to digital inclusion and participation.
- Ensure that the workforce profile matches the needs of Queensland as a knowledge economy.
- Facilitate industry innovation and commercialisation of digital technologies, process and materials.
- Maintain leadership in understanding of the social and business consequences of emerging telecommunications developments.

Priority Actions:

1. Address workforce attraction, retention, training, and career marketing through a range of programs undertaken collaboratively by government agencies as part of the Transforming Queensland IT Strategy 2009 – 2012.
2. Promote business success stories, best practice models and demonstrations of the application of technologies and business systems.
3. Implement education and business programs to support the uptake of advanced communications services by business, industry and the community.
4. Assist Queensland ICT firms, particularly from regional areas, to successfully bid for Government purchasing contracts.
5. Continue support for locally based public Internet access facilities.
6. Develop mechanisms to support decentralised government and reduce the barriers to the greater uptake of teleworking to enable more flexible working arrangements.
7. Facilitate private sector investment in improved customer access network capabilities.
8. Undertake or commission research on on-line learning, business and social functionality, including responding to research findings that identify significant gaps in online participation by the community.

Strategy 5: Sustainable Policy directions:

Queensland's telecommunications matches or exceeds the capability and affordability of its top 10 trading partners.

Policy Objectives

- Assist Government agencies and statutory organisations to develop telecommunications infrastructure which is consistent with Government's commercial and governance objectives.
- Exert maximum influence at an inter (and / or intra) governmental level to reduce barriers affecting better telecommunications infrastructure and services in Queensland.
- Advise on changes to State Government activities and regulations to assist the telecommunications industry deliver the Government's objectives.
- Develop future-focussed telecommunications policy options for consideration by Government.

Priority Actions:

1. Collaborate with the Australian Government to ensure that Queensland receives significant and sustainable benefits from the National Broadband Network and Digital Education Revolution initiatives in terms of infrastructure deployment and service delivery.
2. Leverage Queensland Government's purchasing power to achieve maximum broadband coverage across Queensland.
3. Facilitate appropriate access (within security requirements) to state owned telecommunications infrastructure (including buildings, towers and other structures and rights of way to encourage the deployment of competitive backbone networks and customer access networks) and excess capacity at commercially competitive rates.
4. Encourage local government to facilitate access to local government owned telecommunications infrastructure, including buildings, towers and other structures and rights of way to encourage the deployment of competitive backbone networks and customer access networks.
5. Encourage the coordinated planning of major infrastructure projects such as rail, electricity, road, gas and optical fibre infrastructure to ensure the long term needs of regional Queensland are addressed.
6. Facilitate the extension of high bandwidth communication networks to Queensland research organisations.
7. Advocate to the Australian Government and telecommunications industry the Queensland Government's position for improvements to telecommunications services provision. This advocacy includes:
 - the structural separation of telecommunications carriers into distinct wholesale and retail entities;
 - improvements to the Customer Service Guarantee and Universal Service Obligation to ensure they remain in line with community expectations, as well as including specific requirements for improved mobile and broadband services;
 - regulatory intervention to stimulate competition by opening up the Customer Access Network (CAN);

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- encouraging domestic roaming on all mobile networks to enhance coverage and increase the efficient use of existing capacity and infrastructure investments;
 - improving the availability and accuracy of the location details of VOIP and mobile users of '000' and other emergency services;
 - a preference for terrestrial telecommunications infrastructure to be built in rural and remote areas to service the long term requirements of the population;
 - encouraging the Australian Government to better enforce the rules and requirements outlined under the Telecommunications Act (1997) with respect to carriers accessing public roads; and
 - encouraging the Australian Government to amend the Telecommunications Act (1997) to allow for better cost sharing between telecommunication infrastructure providers and the owners of road assets.
8. Establish planning guidelines, codes and policies that achieve a consistent and certain regulatory environment for telecommunications infrastructure development, particularly in Greenfield developments.

3 Implementation

The implementation of this Framework will be overseen by the Queensland Telecommunications Steering Committee (QTSC) which is chaired by the Department of Public Works supported by members from relevant key agencies and other GOCs.

The QTSC reports directly to the Strategic Information and Information and Communication Technology CEO Committee and will keep the Strategic Information and Information and Communication Technology Council Executive informed of its activities.

Further, the Framework is intended to be a living document, which will guide the development of specific strategies and action plans for some years. Because of the constantly changing telecommunications environment, ensuring that the Framework remains current will be an ever-present challenge. To address this, the QTSC will annually review the Framework, strategies and actions.

4 Revision history

Date	Version	Author	Comments
9/7/2008	0.1	SRN/DG	Preliminary draft based on previous QTSF, Broadband Options paper, principles, Australian Government Submissions.
22/7/2008	0.2	SRN	Updates as a result of discussion with Peter Banks and Ray Heffernan.
4/9/2008	0.3	SRN	Revision for the QTSC meeting.
6/10/2008	0.4	SRN	Updates based on discussion with QTSC members and their nominees.
9/10/2008	0.5	SRN	Comments removed from document for QTSC consideration.
23/10/2008	0.6	SRN	Updates based on revisions provided by DTRDI.
11/11/2008	1.0	SRN	Version endorsed by the SIICT CEOC.

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