

**Tasmanian Government's submission
to the Senate Select Committee on National Broadband Network
February 2014**

BACKGROUND

Tasmania is geographically isolated from mainland Australia. It is an important island economy, but has a very dispersed population and industry base.

Until recently, only Telstra had built and commercialised a telecommunications distribution network connecting the State to the mainland and its towns to each other. Non-Telstra carriers and Internet Service Providers (ISPs) were united in reporting that the price of transmission capacity via Telstra from Hobart-to-Melbourne was ten times higher than the capacity from Melbourne to Adelaide, comparing even more unfavourably with international routes.

Partly as a consequence of this, non-Telstra carriers had by that time made minimal investments in Tasmania in ADSL2+ or other local loop-based broadband technology. By 2008, three non-Telstra ISPs had put in one or two Tasmanian DSLAMs (equipment for providing broadband over copper) but had frozen their expansion or withdrawn from provision of high-bandwidth services, reportedly due to the high cost of transmission, especially across Bass Strait. There was also minimal investment in mobile technology by non-Telstra operators, with Telstra the only 3G provider and Optus and Vodafone, the only infrastructure-based mobile competition, offering limited coverage and capacity, even in built-up areas.

The result was to constrain growth in Tasmania's household Internet use, household broadband use and business use of broadband. On all such indicators, Tasmania was then the worst performing state or territory in Australia.

The following backhaul investments have improved this situation:

- The Tasmanian Government invested over \$30 million on an optic-fibre cable connecting the North, South, and North-West of the State, laid in conjunction with high and low-pressure gas pipelines. After a competitive process, the Government selected Aurora Energy Pty Ltd (Aurora Energy), a State-owned company, to commercialise and expand this asset
- Aurora Energy invested around \$20 million in additional fibre distribution cabling, primarily in and around Hobart
- Basslink Pty Ltd (Basslink) completed and commissioned the only non-Telstra cable across Bass Strait, an undersea optic fibre cable collocated with the Basslink electricity cable. The total cost of this cable, transmission equipment and related infrastructure and contracts is confidential to Basslink.

The Tasmanian NBN rollout was announced on 9 April 2009 by the then Tasmanian Premier, David Bartlett, and the then Prime Minister, Kevin Rudd. It was to include the rollout of fibre to the premises (FTTP) connections to 200 000 premises in Tasmania, within five years of commencement. Remaining premises were to be served by new next-generation wireless and satellite-based services.

The Tasmanian Government understood that nationally, in the areas touched by the NBN FTTP footprint, the NBN would become a near-universal, monopoly, wholesale-only, fixed telecommunications distribution network, replacing Telstra's existing, primarily copper fixed distribution network, as well as Telstra's and Optus' hybrid fibre co-axial (HFC) cable networks.

KEY POINTS

The Tasmanian Government would like to draw the following six key points to the attention of the Committee.

1. NBN is critical to the growth of the Tasmanian economy

The Tasmanian Government regards the NBN as being a game-changer in growing the Tasmanian economy because of the NBN's capability to significantly boost productivity, efficiency and innovation across all sectors and improve government service delivery.

NBN has the potential to transform healthcare, education and government services and to dramatically improve how government formulates and implements relevant policy. For example, NBN would provide high quality telepresence, enabling specialist clinicians to deliver consultations to regional areas, significantly reducing patient travel time and increasing the range of services available across Tasmania.

Similarly in education, NBN would provide high quality telepresence to every school and a skills training facility, thereby increasing the range of courses available, increasing resource availability and expanding the careers pipeline for young Tasmanians. Local digital creative production companies already developing high quality content for national and international markets will expand their opportunities even further.

The Tasmanian Government, through the Department of Economic Development, Tourism and the Arts, has been working with industry through the Digital Futures Strategy (eg Digital Ready and Small Business Online Retail Innovation programs) to assist Tasmanian businesses increase their participation in the digital economy. Since the program commenced in mid-2012, approximately 550 small and medium enterprises have improved their capability, skills, literacy and confidence to grow by providing better services locally and, in some cases, to expand their markets beyond Tasmania. Ubiquitous coverage would provide opportunities for the ICT sector to capitalise on increasing consumer demand by developing and test-bedding NBN-capable applications for business.

2. NBN is critical to improving government service delivery

Ubiquitous equitable access to high speed broadband for all Tasmanians will be important to ensure the full benefit of using the NBN. The completion of the NBN will enable the progressive transformation of government service delivery, especially in regional Australia, to occur.

There are three important trends in service delivery which universal access to high-speed broadband, through the NBN, should further support and enable.

(i) Integrated, flexible delivery of hands-on government services

Better access to broadband in regional locations will support:

- The delivery of a broader range of services at regional and remote service centres
- Collocation of different types of government services, and enablers such as WiFi at government sites

- Rapid deployment of pop-up/temporary service sites or units, for example to assist with emergencies such as bushfire response and recovery.
- (ii) Online remote delivery of government services direct to the user
Anyone, anywhere, anytime services:
- Examples include in-home health care, at-home detention, online learning, and enabling infrastructure like electronic personal health records; and
 - There are significant opportunities in the areas of education, health and justice, with further investigation of best practice models required.
- (iii) Government 2.0
- Examples include citizen-centred web design, two-way/interactive consultation, participative democracy, free release of government data sets, and innovative use of social media to allow communities to contribute to government policy, information collection, and service delivery.

The Tasmanian Government has already established centres in regional areas for the integrated and flexible delivery of government services. These include Child and Family Centres¹ (eg Beaconsfield) and LINC Tasmania (eg West Coast Community Services Hub²), with a broader range of services possible now at such centres through the use of NBN.

Work is underway, through the Spatial Information Foundations Project³, to enable new ways to sharing of spatial information over the NBN. Through the Stats Matter Strategy⁴ the Tasmanian Government is making key statistical information sets available to the public, to augment and complement the improved availability of spatial data.

There is a major dependence on providing a widespread and reliable broadband network through the NBN to fully exploit the opportunities that eHealth presents. Two notable areas are telehealth and clinical support in remote areas (such as the west coast of Tasmania).

- Increasing use will be made of telehealth services, whereby patients will have the opportunity for direct consultations with specialists without the necessity of major travel.
- It is also a very important means of providing support and training for clinicians working in more remote areas, so they do not suffer from professional isolation.
- The emergence of consumers who will have a much more direct involvement in their own healthcare, including monitoring aspects of their health and exchanging this information with their health professionals, is upon us now and is heavily reliant on the availability of NBN type services.

¹ http://www.education.tas.gov.au/parents_carers/early_years/Programs-and-Initiatives/Pages/Child-and-Family-Centres.aspx

² <http://www.linc.tas.gov.au/findus/northwestern/linc/queenstown>

³ <http://www.dpipwe.tas.gov.au/inter.nsf/WebPages/CPAN-8SJ5YF?open>

⁴ http://www.egovernment.tas.gov.au/stats_matter

Furthermore, the NBN offers significant benefits in supporting and facilitating the ICT, broadband and eResearch agendas and as a significant attractor for investment in

- the current CSIRO-UTAS collaboration;
- the Australian Centre for Broadband Innovation node;
- the UTAS's Human Interface Technology (HIT) Laboratory;
- the Digital Creative Industries' networked content creation and distribution initiatives; and
- the Sense-T Program (the Tasmanian Government understands that a separate submission is being provided to the committee on this initiative).

3. NBN must support regional innovation

The NBN initiative in Tasmania should be implemented in such a way as to:

- *Enhance local, on-island, information and communications technology development.*
For example, innovation in retail products should be encouraged, not limited by the design of wholesale products. In particular, services suitable for Government and corporate users are urgently needed.
- *Improve the capacity across Bass Strait, not only for use of NBN but also for other transmission services.*
The most efficient, practical, sustainable, and certain way of delivering cost-effective capacity across Bass Strait would be through the construction of a second robust and dedicated non-Telstra undersea cable.
- *Enhance local, on-island, service and content deployment capability.*
For example, this requires that NBN traffic not be routed via the mainland.

In addition, it will be important to ensure that competing technologies and services are allowed to thrive in parallel to the NBN. This includes:

- Wireless and mobile telecommunications;
- Services for the business market. Although NBN Co may widen its range of business and corporate services in the long-term, Tasmania will need to maintain and grow its other suppliers of infrastructure to ensure competition and innovation, particularly in the corporate and business market; and
- Services for and from ICT-intensive businesses such as broadcasters, the higher-education and research sector, data centres and application providers and some government agencies.

Together, these infrastructures will support Tasmania's digital revolution, which the Tasmanian Government considers the most important infrastructure revolution in this State since the distribution of electricity a century ago.

4. An alternative approach to the rollout of NBN fibre cabling is available

The Tasmanian Government is a strong supporter of the full rollout of optic fibre to the door.

In November 2013, the Tasmanian Government provided the Australian Government and NBN Co Limited with an alternative proposal for an aerial rollout of the NBN in Tasmania. A copy of the proposal from the State-owned business Aurora Energy is attached.

Aurora Energy's considers that the NBN can be rolled out in Tasmania more quickly and at a lower cost through increased utilisation of aerial optic fibre deployment on electricity power pole infrastructure.

5. There is uncertainty around the future rollout of the NBN in Tasmania

Given the ongoing consideration of the outcomes of NBN strategic review, there is now considerable uncertainty around both the timing of, and the construction approach to, the new roadmap for the rollout of the NBN.

This uncertainty is of concern to the Tasmanian Government, because of the potential negative impact which it has on investment and business confidence.

6. The Tasmanian Government is ready to use the NBN

All three of the Tasmanian Government's fixed broadband suppliers (Telstra, Aurora Energy and iiNet) offer NBN services, which are being used or trialled by Government agencies in the available areas.

As at 31 January 2014, 40 Government sites were connected via the NBN. These were 15 schools, six LINC's and/or Online Access Centres, six Police Stations, five Service Tasmania Shops, one community health centre, and five other locations

The Tasmanian Government's use of NBN is expected to grow as the network expands, and when NBN Co offers services with committed fault repair times and designed for use over government and corporate networks (current services are designed for home and small-business use).

Attachment:
Aurora Energy's proposal