



Submission by Digital Tasmania

to the

**Senate Select Committee on the
National Broadband Network**

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Introduction

Digital Tasmania welcomes the opportunity provided by the Senate to contribute to the discussion on the National Broadband Network proposal.

We commend the vision of providing an egalitarian framework for all consumers to access the telecommunications network and at the same time for a range of service providers to be given access to these consumers without discrimination.

However we feel that the bar has been set too low (12mbit/second minimum) and that the preferred network model of Fibre-to-the-Node (FTTN) utilising current copper or cable TV paths is a short sighted method to meet this long-term national vision.

We believe that a fully fibre network, Fibre-to-the-Premises (FTTP) is the only solution that will future-proof Australia and the government's investment against advancements in technology and consumer's needs.

Our comments will focus on the impact that the NBN could have in Tasmania.

Background

Telecommunications consumers in Tasmania have historically been at a disadvantage compared to those in the mainland states. Tasmania's unique geography, low population density and physical separation from other states by 300km of water means that Tasmania has received what some would view as "second class citizen" treatment by some providers.

In recent years, the Tasmanian Government has taken many proactive steps towards improving access to telecommunications, including the investment in fibre optic cable laid alongside gas pipelines into all the major population centres, and ensuring that fibre optic cable was laid across Bass Strait along with the Basslink electricity interconnector.

Whilst it has been a long and at times rocky process, Tasmania is on the verge of realising the benefit of these strategic investments. Given the appropriate regulatory environment, Tasmania can flourish under a National Broadband Network. The wrong framework however could see massive waste of State and Federal taxpayer money on competing networks, neither of which will deliver maximum benefit to the Tasmanian community.

Key Issues

Digital Tasmania submits that the key issues in operation of the National Broadband Network for Tasmanian consumers revolve around ensuring that:

1. Consumers are not disadvantaged by the changeover to an NBN-delivered broadband service,
2. That existing investment and opportunities in backhaul and local access are not wasted,
3. Access seekers on the NBN must not be “locked in” to using NBN backhaul,
4. That Tasmanian broadband consumers and access seeking ISPs should not be disadvantaged if the Tasmanian Government’s part proposal for State-based NBN funding is successful,
5. FTTP is considered the preferred method of delivery, and
6. Historically underserved regional and rural areas, including Tasmania are some of the first to receive the benefits of an NBN rollout.

1. No disadvantage

Consumers, from those at the budget end of the current broadband market, through to so-called “power users”, should be no worse off under an NBN delivered service compared to the price they pay for broadband delivered by their current ISP.

The committee must consider a regulatory framework which would apply a “no disadvantage” test to any proposed wholesale pricing model.

The NBN process has specified a minimum deliverable bandwidth, however it is silent on the subject of what a fair market price would be for such access. Consumers must have access to ADSL-comparable speeds at similar prices during the switchover to NBN, either through the NBN itself, or through the preservation of existing ADSL hardware.

We believe that it is the consumer’s right to choose what they consider to be an acceptable broadband access speed, and what they are willing to pay for that service. The role regulation plays within this is crucial, ISPs must be able to access the NBN at competitive rates compared to the existing ADSL wholesale port costs.

The NBN should implement a regulatory framework which would require the successful proponent provide 256kbps, 512kbps and 1.5Mbps wholesale products at pricing equivalent to or better than current market rates.

This would enable ISPs to continue to offer these “low-end” broadband services to their customers. To do otherwise may indeed force some broadband users back onto dial-up services, which they may consider to be better value for their needs.

2. Protect existing investment and opportunities

The Tasmanian State Government has already committed over \$60 million of taxpayer funds into the provision of fibre optic networking covering the major population centres of Tasmania and connecting to Victoria. Given the foresight shown by the Tasmanian Government in investing in this infrastructure, the taxpayers do not want to see this asset made obsolete. The Tasmanian Government through its departments, business enterprises and associated contracts, have access to a vast number of towers on hills and mountains as well as power, railway and pipeline easements.

Combining all of these assets, as well as those accessed via councils presents a very powerful opportunity to connect many regional and remote areas of the state that other proposals cannot.

Any regulatory changes required to implement NBN must protect and maximise these existing investments.

In regard to interstate fibre optic infrastructure, Basslink Telecom is currently in the process of commercialising their fibre optic cable which, when enabled, will interconnect Tasmania and Victoria. The route from Melbourne to Hobart (which this cable will form part of) is currently a declared service, over which the ACCC maintains pricing control.

This declaration must be preserved regardless of the outcome of the NBN process, until such time as a 3rd competitor enters the market for this route.

Furthermore, the committee must give consideration to how this current declaration will be enforced in relation to the services provided over the route by any NBN operator.

Many ISPs have invested in their own exchange-based access hardware, such as ADSL2+ DSLAMs in exchanges around the country, including to a small degree Tasmania. The successful NBN proponent should not be permitted to “strand” this infrastructure and monopolise the local loop by implementing schemes such as e.g. “whole pillar migration” in deploying a Fibre-to-the-Node network if that is the desired last mile solution.

It is necessary that the committee examine the issue of local loop access in the current regulations, and consider the possibility of altering this to allow “mid-point injection” of FTTN services while preserving the existing local loop.

This would enable co-existence of existing ADSL and ADSL2+ services with an NBN delivered over phone lines via the newer VDSL2 standard, preventing

the stranding of current infrastructure, and enabling independent investment in non-NBN infrastructure by ISPs seeking to differentiate their service offerings.

3. “A la Carte” approach for access seekers

The NBN should leave access providers free to seek intra- and inter-state backhaul at competitive prices. To do otherwise we believe would be an unfair restraint of trade upon ISPs who have acquired their own backhaul services.

This is particularly critical in Tasmania, where ISPs must currently move data into and out of the state via a monopoly provider at a cost many multiples higher than that paid between many other mainland capitals.

The committee must ensure a regulatory framework in which access seekers are able to pick and choose which parts of the NBN infrastructure they use, particularly where they may have existing infrastructure or the ability to acquire backhaul services at a more commercially attractive rate.

This would provide the opportunity for ISPs servicing Tasmania to independently negotiate access on a commercial basis to the Tasmanian intra-state fibre network, and capacity on the Basslink fibre, ensuring existing investment is not made obsolete. Such interconnection could conceivably occur within an FTTN network at the node itself, at existing exchanges, or any other logical point of aggregation/presence.

4. Ensure fair dealings with operators of Victorian NBN Component

In the event that the Tasmanian Government lodges and is successful in a state based proposal, the regulatory environment must ensure that ISPs servicing Tasmania via the NBN in the future are not unfairly disadvantaged, as they currently are, by the cost of data transfer into and out of the state.

Unless another interstate fibre optic cable is laid, the Tasmanian NBN will need to interconnect with the Victorian NBN operator at some point. Tasmanians should not be penalised due to the size or composition of traffic flow into and out of the state.

The committee must recommend a regulatory framework in which interconnections between different NBN operators are on an equitable basis, regardless of the size or composition of the market served.

Backhaul to Tasmania is currently limited to 2 fibre optic cables operated by the incumbent and one yet to be activated by Basslink Telecom. To ensure fully competitive and reliable access between Tasmania and the Australian mainland (Bass Strait), a 2nd cable independent of the incumbent is required.

The committee must ensure that NBN funding provides for augmentation of Bass Strait connections with a second independent cable that all access seekers can obtain backhaul at reasonable rates.

Such a cable could be constructed on the basis that some fibre pairs are “swapped” with those on the Basslink cable, thereby providing both cable operators with a redundant path in the event that one cable fails. This is a minimal cost option for providing such redundancy.

5. FTTP as a preferred method of delivery

Digital Tasmania believes that a fibre-to-the-node solution is not the generational step forward that the National Broadband Network vision deserves. Some copper elements of this network may be approaching 50 years of age and cannot be fully relied upon.

A future-proof Fibre-to-the-Premises (FTTP) deployment, whereby homes and businesses are connected purely by fibre, should be strongly preferred to the stop-gap FTTN alternative.

This enables the NBN to be fully future-proofed against unforeseen developments and needs which may arise. In Tasmania, the TasCOLT FTTP trial has been under way for several years and has connected up to 1000 premises in urban several areas. It provides a concatenation of several digital services through the one delivery system, services such as Internet, telephony, television and video conferencing between schools.

The fibre optic connections for this trial have been connected to premises primarily via overhead power poles and lines. The in-field patching of fibre connections which eliminates the need for time consuming fusing and splicing, speeds the construction of the network and is a first for the southern hemisphere.

An overwhelming majority of residential and commercial areas in Tasmania are serviced by overhead power lines which are managed by a Tasmanian Government business. Therefore this method of NBN delivery makes economic sense and is complimentary to the underlying vision of getting all premises connected to a new telecommunications network in a timely manner.

6. Service to underserved regional and rural areas such as Tasmania first

The ongoing problem of underserved and regional areas such as Tasmania receiving sub-par telecommunications services must be recognised by the committee. The NBN can solve this situation by Tasmania being among the first areas in Australia to be subject to any testing or production rollout.

Business and residential consumers in all other capitals have access to a wide range of competitive telecommunications options whether they are wired or wireless. In Hobart the choice is limited to a number of CBD exchanges and a few wireless providers. Many rural and regional areas of mainland Australia already have a greater choice of telecommunications service than many other parts of Tasmania.

Competitive broadband services in Tasmania currently depend on ISPs acquiring services wholesaled by the incumbent operator either in part for backhaul or almost in their entirety for ADSL services.

Rather than installing another cable to; or node nearby metropolitan premises which already have a choice of 1-2 cable TV networks, 2-8 DSLAMs on their exchange, or a multitude of wireless services, Tasmanians without that vast array of choice should receive it first.

Conclusion

Digital Tasmania welcomes the opportunities for improved and equitable telecommunications access that a successful National Broadband Network will bring to Tasmania. We do however note significant deficiencies in the process and strongly encourage consideration be given to the unique needs of smaller, less populous states such as Tasmania, who are already disadvantaged in the existing broadband market.

We continue to outline the need for the application of some form of “no-disadvantage” regulatory test, so that users of budget broadband services do not become second class citizens of the information economy, but instead are able to utilise broadband services to improve their socio-economic standard. Digital Tasmania suggests one way to achieve this is mandating the provision of ADSL-equivalent wholesale ports at current or better than market rates paid for the existing ADSL ports.

Digital Tasmania seeks a regulatory framework which addresses the current disadvantages experienced by Tasmanian broadband consumers, particularly in the area of intra- and interstate backhaul. Significant taxpayer money has been invested by both the state and private enterprise in attempts to address these issues; these assets must not be made obsolete.

Digital Tasmania believes that considered regulation is required to ensure competition is encouraged and access seekers are free to seek commercial arrangements with both NBN and other non-NBN operators on an “a la carte” basis. This not only ensures a level playing field can be created for all access seekers across the entire National Broadband Network, but offers ISPs the ability to differentiate themselves from the competition through competitive commercial arrangements.

Digital Tasmania believes that careful consideration must be given to the special requirements inherent in a State-based Tasmanian part-proposal with respect to interconnecting across Bass Strait with other NBN operators.

Trials in Tasmania have already demonstrated the feasibility of deploying fibre to the premises (FTTP) in brownfield sites, using the latest in-field patching techniques. Digital Tasmania firmly believes that this type of technology should be the preferred method of delivery of NBN connectivity. Failure to do so may lead to a network that is obsolete in parts before it is even complete.

Finally, Digital Tasmania notes that rural and regional areas of Australia have been significantly disadvantaged by the cancellation of the Opel Networks

scheme. In light of this, we strongly encourage the successful NBN proponent(s) to build the network from the “outside in”; in otherwords, to begin deployments in the areas of regional and rural Australia, and Tasmania in particular, which are currently underserved by existing broadband access technology, rather than in those areas which are already competitively serviced by multiple ADSL2+ or cable broadband providers.

Digital Tasmania appreciates this opportunity to present to the Senate Committee our view of issues surrounding the National Broadband Network as they relate to Tasmanian consumers. We look forward to the opportunity to engage with the committee as their enquiry continues.

About Digital Tasmania

Digital Tasmania is a consumer action group, created to give a voice to the views and needs of Tasmanian consumers in the digital age. As Australia's island state, Tasmania faces unique telecommunications challenges. Our low population, physical separation from mainland Australia and distributed population are all unique factors that impact on how telecommunications are delivered in our state.

Our goal is to strive for improved fixed, mobile and broadcast communications services through market competition and regulation that is in the interest of the consumer.

Digital Tasmania is a non-profit organisation and relies solely on funds and in-kind donations from supporters.