

Committee Secretary
Senate Select Committee on the National Broadband Network
Department of the Senate
PO Box 6100
Parliament House
Canberra ACT 2600

Via email: broadband.sen@aph.gov.au

August 2008

Re: Senate Select Committee on the National Broadband Network

Thank you for the opportunity to provide input to the above review.

CTN has submitted comments to a range of public inquiries pertaining to the National Broadband Network (NBN), and here we offer comments relevant to the broad questions contained in the Terms of Reference and reiterate the key issues for consumers. We emphasise that the NBN should provide greater availability of better services to under-serviced areas; the need for pricing and affordability options to be canvassed in much greater detail; and the need for regulatory arrangements to reflect the NBN as providing an essential service.

About CTN

The Consumers' Telecommunications Network (CTN) is a national peak body of consumer and community organisations, and of individuals representing community interests, who participate in developing national telecommunications policy. CTN's members are national and state organisations representing consumers from non-English speaking backgrounds, deaf consumers, indigenous people, low income consumers, people with disabilities, young people including children, pensioners and superannuants, rural and remote consumers, women and consumers in general.

Government Intervention

CTN is pleased that public investment will occur in the creation of an NBN and that as a result, some control over future regulatory developments will be maintained. Whilst the public debate has been about building a network so the Australian public can reap the benefits of a high-speed broadband network, if the network actually belonged only to a private entity it is unlikely that the necessary public interest considerations would be fully considered.

Lessons from recent history demonstrate that there is a need to make it clear that there are responsibilities attached to providing a natural monopoly service and that those responsibilities are in line with public expectations. It has become clear that since the final tranche of Telstra privatisation has occurred, that Telstra's responsibilities have shifted to be entirely toward meeting the needs of shareholders, rather than all Australians, as was expected when it was a publicly owned monopoly providing an essential service.

The reality is that competition for broadband service provision is limited to city areas with high numbers of potential customers for the competitors. Telstra is, price-wise, rarely the most affordable option in a competitive environment, on face-value evaluation. Coupled with the fact that consumers in less-populated areas are not equally getting a choice of providers (because of an ongoing lack of competition), we definitely see a need for the proposed open-access network to offer new service opportunities for those consumers to whom the principle of competition is still to deliver a choice of provider.

CTN expects that the availability and quality of broadband will vastly improve with the development of the NBN. The pricing and affordability of broadband are more difficult to ascertain, as they will depend on accompanying measures to ensure affordability. With fast, high quality services, there is some expectation of price reflecting the service and ongoing maintenance and improvement thereof. However, if services are not affordable, there is a risk that pricing could be probative and the benefit of high speed broadband not effectively utilised. As discussed elsewhere in this submission, there's a role for government in establishing pricing policy to ensure the services are affordable for end users.

Existing availability of broadband

The 2006 Census found that 58% of Australian households had an Internet connection. Broadband was the most common type of connection (37%), close to double the proportion with a dial-up connection (20%)¹. In the majority of states, broadband rates were considerably higher than dial-up rates. However, states with low rates of total Internet connection tended to have similar levels of broadband and dial-up connections. Total Internet connection rates were higher in capital cities than the rest of the country. In Sydney, for example, 62% of households were connected to the Internet compared to 52% in the remainder of NSW. Broadband connection rates followed a similar pattern, with higher rates in the capital cities.

In 2007, the Internet Industry Association estimated that ADSL was available to 91.8% of the population. The Australian Communications and Media Authority's Communications Infrastructure report is difficult to interpret with regard to where wireless services are actually available, and this is further confused by the fact that most of the service providers seem to be providing services in competitive metropolitan areas.

Broadband delivered via ADSL technology is only available up to approximately 4km from the copper wire exchange. High speed, reliable, affordable and metropolitan equivalent services are not always available, even for people who live in reasonably

¹ Online at:
<http://abs.gov.au/ausstats/abs@.nsf/7d12b0f6763c78caca257061001cc588/3fe57172be7946abca257306000d5847!OpenDocument> accessed 13 July 2007

large towns. In our consultation for the recent Regional Telecommunications Review, we heard many complaints from consumers and peak group representatives from rural areas, who are unable to get access to ADSL services because they are not close enough to their local exchange.

For people in rural areas, even those on the outskirts of town, there is an ongoing lack of availability of basic services. Recently a person who lives 10km outside Coonabarabran in New South Wales contacted us to express his frustration at being unable to get fixed or wireless broadband. A similar story from Gayndah in Queensland was reported. Additionally, the quality of the copper lines themselves is another barrier to actually being able to access ADSL, even if the exchange is enabled.

We recognise that some mobile networks with data capability offer broadband to around 98% of the population. However, the critical factors of speed, a lack of quality and reliability benchmarks, and pricing is nowhere near equivalent to ADSL services that are available. In particular pricing for mobile broadband can be exorbitant, and has caused significant problems for consumers receive huge bills for mobile broadband use.

We urge the committee to be very sceptical about claims about mobile broadband providing equivalent services to consumers when availability – but not quality or affordability or reliability- is really the key advantage over fixed broadband. Whilst any service is far preferable to none at all, the underlying policy needs to reinforce equivalent service availability, regardless of location.

Competition

ISPs concentrate on rolling out services in areas already serviced by competitors. The ability of competitors to put their own DSLAM's has had success in areas where there are lots of potential custom. Telstra itself has a register for communities who want ADSL to be enabled in the local exchange, which is useful for indicating at least preliminary interest. In areas where there are fewer potential customers for the service provider, there's less competition to provide services. The end-user needs and interests are not necessarily the driving factor in decisions of potential competitors to existing Telstra services in those areas.

Universal NBN coverage is preferable to an ad-hoc approach

We understand that NBN tenderers will have to provide a solution for the remaining 2% of the population, and seek assurance that a two-tiered technological solution will not disadvantage remote users. It is critical that sound policy decisions are made at this stage to encourage and facilitate access to high speed broadband for *all* Australians.

Establishing a policy requirement of universal availability at the outset of all roll-outs will also avoid the need for ad-hoc funding programs that address gaps in economically inefficient ways, as has been the approach in recent years. The commercial realities of building a large network across long distances needs to be built into business plans and funding models - not avoided or divided into separate roll out programs.

The Long Term Interests of End Users will not be enhanced by a process that encourages infrastructure developers to consider only building the network in cities and major regional areas. A preferential approach to infrastructure roll out would mean that those less commercially attractive areas would be discriminated against on their geographical location, rather than addressing their need and right to universal service. There will need to be consideration of the technological feasibility aspects of delivering services to more remote areas. We should also expect technology will continue to evolve. Aiming for only 98% of the population will mandate an unequitable roll out of services that differentiate between urban and non-urban areas – which is precisely the opposite of our existing public policy that seeks to ensure a ubiquitous network with equitable access to it, regardless of location.)

Technology solutions

In the consultation CTN undertook to inform our submission to the Regional Telecommunications Review in 2007, we found that regional and remote access to high- speed broadband services is inadequate to meet demand and nowhere near equivalent to what is available in metropolitan areas. Constituents and other parties we consulted complained that their location meant only satellite or ISDN services were available. These services are not equivalent in any way to the services available in metropolitan areas because of low speed data transfer and poor reliability.

We question whether satellite could be considered a suitable equivalent broadband service unless there are absolutely no other options available. Our understanding is that satellite does not allow for information to be transmitted upstream. Practically, this means for example that it's not possible for the end user to upload photos onto their website or YouTube (for example). Satellite is comparatively more expensive, and inferior in speed and quality of service (particularly when factors such as the weather impact on availability).

The uncertain reliability of wireless technology was also raised repeatedly by those consulted by CTN. We received recent feedback from North Western Tasmania suggesting that the terrain prevented even ABC Radio signals being transmitted. Accordingly, there is great concern about how a wireless or satellite broadband service would be able to function effectively as an adequate alternative to the fibre service the vast majority will use. There is a need to ensure that services rolled out are fit for purpose in rural, regional and remote areas.

Whilst we do not offer specific technical solutions, we suggest that benchmarks be created to clarify what will constitute an equivalent service. This will need to be adjusted over time, but this will help ensure that remote users aren't offered services that are not adequate. We note that the Australian Broadband Guarantee considers a metro service to be a minimum 512-128kbps data speed, 1GB per month data usage and a total cost, over three years, including installation and connection fees of \$2,500 GST inclusive. We question whether this is an up-to-date reflection of community expectations about the speed of a broadband service, and whether "basic for a family's usage" could be supported by a service that matched the above criteria.

It's important to recognise that a one-size fits all approach won't be appropriate for all Australians though. The most appropriate way to provide broadband in a community will vary depending on the actual community itself. Sometimes, a central hub or

community technology centre (CTC) is an appropriate way to provide services in low-density communities. CTN is aware of at least one excellent assessment of these innovative, community based access centres that discusses the successes and failures of CTCs². The majority of those centres rely on support from local government by way of Provision of premises, Grants, and Payment of utility costs (electricity and/or telecommunications). Only three CTCs out of (approximately) seventy became commercially independent. The success of the programs in terms of the benefit provided to the community was very high, and we urge the Department to seek out full details of this investigation.

The CTC assessment clearly indicates the need for ongoing program funding to ensure the centres are not simply shut down when they cannot become self-funding. Having commercial sustainability requirements attached to these kind of projects will in virtually all circumstances lead to the closure of these centres. The benefits provided to a community cannot be fully explored without a long term funding arrangement that isn't contingent on obtaining other commercial funding. Like a raft of other projects funded on an ad-hoc basis such as through HiBIS, Backing Indigenous Ability, once the funding finished, the project concluded and the entire benefit of the project was lost. If the policy aim is indeed long-term access solutions, it is time to commit to long-term ongoing funding agreements.

Price controls need to apply

Retail pricing of services is a critical area that will heavily impact on the uptake of NBN services when they become available. Given the contentious nature of pricing at the wholesale level of NBN services, it would be sensible to ensure the ACCC had some role, at least initially, in ensuring prices were set at a level that was affordable and made a basic service available. We would like to see some regulatory arrangements that ensure that consumer access is not artificially constrained through service offerings, such as artificial download constraints or restrictive bundling contracts.

Consumer protection must apply to the NBN

CTN is pleased that a commitment to the protection of competitive principles has already been made. Infrastructure providers must not be given regulatory exemptions that create effective monopolies; we strongly believe barriers to investment can be addressed in alternative ways. Regulation should be consistent industry wide, and will need to cover pricing arrangements if we are to ensure affordable and equitable access for all.

The consumer protection principles that underlie the Standard Telephone Service must be adapted to reflect the fact broadband is providing essential services such as voice telephony or equivalent services. This means that the principles of universal access to all people where they live or work, and minimum service and repair guarantees are in place and reported to the regulator on an ongoing basis. The following is a non-exhaustive list of protections that need to be incorporated:

- Universal Service Obligation

² Will Tibben, *A communications policy perspective on CTC sustainability in regional Australia: Commercial Viability and Social*, presented to CTN Conference 2008. Power-point presentation available online at: <http://www.ctn.org.au/content.cfm?Live=0&ContentType=Content&ContentID=314>

- Customer Service Guarantee
- Price controls
- Network Reliability Framework
- Priority Assistance
- Complaint escalation and resolution at TIO
- Emergency call service access
- Low-income measures
- Disability/Assistive equipment program
- 'Utility' approach to disconnections

The NBN should fit within an expanded Universal Service framework

In our submission to the (then) DCITA as part of the USO Review in November 2007, CTN outlined 3 key elements of a user-centric universal communications access regime, underpinned by a legislated right to access basic services. Our recommendations were:

1. Legislate the Australian Broadband Guarantee

CTN believes there is an opportunity for the ABG to be made into a legislative obligation. The function of the guarantee means that, effectively, all Australians will be able to access a metro-comparable broadband service with a financial incentive payable to the service provider if necessary to ensure access. This is an excellent policy initiative that recognises the importance of internet access and seeks to ensure people take up broadband services. Clearly there will be issues around when a provider should be eligible for the subsidy, but this should be considered as part of a consultative process.

2. Create an Australian Voice* and Text Telecommunications Guarantee (*or voice equivalent) which hands Choice back to Consumers.

This would mean that all consumers, regardless of their location, could nominate their preferred any-to-any service type and provider that allows for voice or voice equivalent communication.

3. Establish An Australian Communications Social Safety Net

We envisage a number of aspects to a Communications Safety Net that recognises the ongoing need to support consumers who would have difficulty accessing their basic service without ongoing assistance. This needs to be considered as part of the wider affordability investigation.

Regulatory and legislative change must be subject to consultation

The network infrastructure proposal must not adjust or remove elements of the regulatory regime to encourage investment without a thorough public consultation and consideration of the long- term interests of end users. It needs to be recognised it is not appropriate for business to decide its own regulatory framework, given the potential for any new network to be a natural monopoly.

Any *specific* proposals need to be subject to public consultation. It is important that there be public scrutiny of any changes to the regulatory environment with a reasonable period of time to assess the consequences.

Affordability

Affordability of broadband is an area CTN believes requires significant further investigation. We believe that a lack of affordability – and perceived lack of affordability of broadband – is a serious inhibitor for many low-income people, especially those with limited experience with technology. The consequence of allowing affordability to function as a barrier to broadband uptake will have severe consequences for Australian society. There are any number of practical ways to ensure NBN services are affordable; we recommend the following minimum measures:

- a) Create a communications allowance or rebate to enable affordable services, available to all who are recipients of government benefits;
- b) Allowance/rebate be available to users who require premium services to meet basic communications needs (e.g. access to Video Relay Service);
- c) ACCC to have price controls over new high-speed broadband networks;
- d) Protect against the ongoing issue of unexpected high bills resulting from usage of supposedly 'unlimited' services;
- e) Introduce equipment rebates or vouchers for low-income consumers for start up costs and users of assistive equipment.

Affordability isn't just about price of broadband services. Access to a computer is a pre-requisite to getting a residential broadband connection, and there would seem to be a need to look at issues about access to computers as part of this project. The 2005-06 ABS Multi-Purpose Household Survey indicated that 60% of Australian households had home Internet access and 70% of households had access to a computer. The ratio of Australian households with access to the Internet at home as a proportion of those with access to a computer has increased steadily according to the ABS. In 1998, only a third of the households with computer access had access to the Internet. In 2005-06, this stood at 86%, reflecting a growth in take-up of the Internet during this period from 1.1 million households in 1998 to 4.7 million in 2005-06³.

Many of the cheaper plans available to consumers have very low download limits, which means that if they exceed their limit they are hit with very large excess usage charges. This means that consumers who choose the cheapest plans are not necessarily getting the best value or their needs met. There's a need to have a stated government policy objective of ensuring affordability of broadband for all consumers, and that barriers to uptake are pro-actively identified and addressed.

Benefits need to be demonstrated to late adapters

The benefits of broadband are well summarised in a recent publication from the previous Department of Communications, IT and the Arts:

³ ABS, *Household Use of IT*, pp8-9

Broadband connectivity has increased efficiency, with users doing the same things as on dial-up, only faster. It has also addressed some of the social and economic issues relating to isolation in regional communities. It brings tangible benefits to the daily functioning of businesses, the delivery of health services and the lives of individuals and families⁴.

However, those benefits are not always immediately obvious to those who currently live without it, for whatever reason. Some recent Australian research that involved interviewing consumers who either had broadband, intended to have broadband, or who had stated no interest in doing so in the foreseeable future, found that the key reasons contributing to the adoption or non adoption in homes were: the need to feel in control of technology in the home; the feeling of frustration with the existing technology and service providers; and the complexity of the purchase decision action as a barrier to adoption⁵.

The ex-Department also published a series of useful case studies on a number of broadband roll out projects to highlight the benefits and issues resulting from new broadband connectivity in four regional communities, which received Australian Government funding. In assessing the factors affecting the demand for take up, apart from the barrier of no access to broadband, the reasons were:

- lack of awareness of benefits of broadband;
- family incomes and perceptions about high broadband costs;
- confusion over broadband technology and packages;
- misinformation from providers about what is available;
- ageing of the population;
- family make-up (e.g. whether there are children or young people in the family);
- literacy and education;
- limited use of connection; and
- negative experiences with dial-up and scepticism about broadband as the possible solution.

For those connected via broadband, the critical question is that of effective use. Although some innovative uses were reported across the case study areas, many users are only using broadband for basic applications such as email⁶.

The Department's analysis of the case studies seems to imply, in part, that the way consumers are using broadband access is relatively unsophisticated, and that there's a lack of interest in full exploration of the benefits. Others have suggested that some people simply don't want to learn how to use new technologies, the implication being that this is a deliberate personal choice, rather than a reflection of existing barriers to uptake.

⁴ Department of Communications, IT and the Arts, *Broadband in regional Australia: Making a Difference*, p 38. Online at www.dbcde.gov.au

⁵ Adams, P *Isolating 'why' Australian households adopt broadband* Telecommunications Journal of Australia Vol 56 No 3/4, Spring /Summer 2006 pp 27 –36

⁶ DCITA, *Making a Difference*, p44

Whilst availability is an obvious factor, we need to keep in mind that the utility of the services being made available will be important to encouraging people to utilise broadband. For example, English speakers seek material in the English language. For Aboriginal people, the lack of materials in their primary language is exacerbated online. With nothing that is readily accessible, even if there is broadband access, the interest in exploring the web is diminished. It is therefore important that the development of web resources and projects also be resourced as a means of encouraging uptake of broadband.

Investment in Training and Equipment Support

It is still possible to get by without internet access, but it's getting increasingly difficult to do so (and not be relying on someone accessing it for you by proxy). As more basic services are moved to an online environment, it's going to be critical that access is ubiquitous. Specific attention must be paid to developing appropriate programs to support education and training. We have ongoing concerns that many consumers are not taking up broadband because they don't have the skills and know-how to get started. Without complementary programs, disadvantaged consumers will remain without access to basic services and will miss out. It is critical that funding and programs are made available on a continuing basis to encourage hardware and skills training to use services to the greatest utility.

CTN calls for the establishment of an independently run assistive/disability equipment program, co-funded by industry and government, that can recommend appropriate technology for users with particular needs; an expert consumer committee will be integral to the decision of appropriate equipment. This will ensure consumers have a choice of the type of equipment available to them, and address a long-standing issue consumers have had with the limitations on available products and the lack of choice of service provider that results.

We also think there's a pressing need for greater e-security awareness training and resources for consumers who wish to learn these skills. Without the necessary information, consumer confidence and uptake could be negatively impacted upon. It is critical that training and education programs are not seen as 'extras', but rather integral components of a well-planned and considered program to ensure all Australians can access the NBN.

Accessible Broadband for All Australians

In April 2008, CTN, Media Access Australia and the Australian Communications Exchange published the policy paper "Accessible Broadband for All Australians". The paper discusses the importance of having a strategic plan to ensure broadband can be, and is, accessible for all Australians.

The paper identifies the benchmark areas that must be addressed in the creation of the National Broadband Network, namely: universal availability; technology quality of service; regulatory arrangements; affordability; service offerings; equipment; support programs and training; and content accessibility. Importantly, it outlines the practical individual policy steps that government can take in order to achieve the outcome of accessible broadband for all.

The specific recommendations from that report are as follows (note that some have been reflected in the NBN proposal and are reinforced elsewhere in this submission):

1. Universal availability

- a) Develop a National Broadband Plan with a blueprint for achieving 100% coverage, with funding preferences to subsidise coverage in un-serviced areas, and regular auditing of existing availability compared with the blueprint;
- b) Department of Broadband, Communications and the Digital Economy (DBCDE) to create a reference group which includes consumer experts to consider applications for funding to achieve universal coverage;
- c) Use the Communications Fund revenue to pay for broadband roll-out; this was derived from the sale of Telstra and should be re-invested in future communications services.

2. Technology Quality of Service

- a) Mandate quality of service levels for broadband services, including minimum speed levels through industry standards, to support minimum essential communications services;
- b) Create a standing expert committee which should include consumer representatives to provide guidance on technology issues.

3. Regulatory Arrangements

- a) Mandate access to broadband as an essential service by extending the Universal Service Obligation or an equivalent regulatory mechanism to cover broadband services, for example through legislating a Broadband Guarantee;
- b) Develop a self-regulatory Code to address net neutrality to ensure equal access of communications over broadband networks;
- c) Ensure any publicly funded (or partly publicly funded) network is subject to structural separation to ensure wholesale competition that will allow consumers to have a choice;
- d) Require community impact statements that ensure all broadband infrastructure roll-outs are accessible. This can be implemented in the same way as regulatory impact statements.

4. Affordability

- f) Create a communications allowance or rebate to enable affordable services, available to all who are recipients of government benefits;
- g) Allowance/rebate be available to users who require premium services to meet basic communications needs (e.g. access to Video Relay Service);
- h) ACCC to have price controls over new high-speed broadband networks;
- i) Protect against the ongoing issue of unexpected high bills resulting from usage of supposedly 'unlimited' services;
- j) Introduce equipment rebates or vouchers for low-income consumers for start up costs and users of assistive equipment.

5. *Service offerings*

- a) Create a model contract for broadband services, incorporating existing state unfair contract legislative protections, and including protection against restrictive bundling practices;
- b) Establish an independent advisory service that can suggest a suitable provider and plan particularly for vulnerable consumers;
- c) ACCC to police misleading advertising of broadband speeds and unlimited services.

6. *Equipment*

- a) Establish an independently run assistive/disability equipment program, co-funded by industry and government, that can recommend appropriate technology for users with particular needs; an expert consumer committee will be integral to the decision of appropriate equipment;
- b) Inclusive design principles incorporated in Australian and international customer equipment Standards.

7. *Support programs and training*

- a) Use the Communications Fund to create a funding program for ongoing training programs for community educators with sufficient resources to deal with long-term skills creation;
- b) Ensure ongoing skills training so that community educators are up to date.

8. *Content Accessibility*

- a) Audit government websites to ensure they conform with W3C standards;
- b) Ensure that all Internet content that is created by any level of government, or is created using government funds, should have mandatory accessibility provisions, captions and audio description, as well as W3C compliance
- c) Ensure that material from television (vodcasts, etc) originally presented with closed captions should also be offered on the net with an option for captions (open or closed);
- d) Encourage projects and pilots of innovative information provision, eg Auslan podcasts and captioning of video information, especially for government websites;
- e) Fund accessibility training;
- f) Recognise and promote best practice exponents via regular awards;
- g) Initiate accessibility incentive schemes for content providers.

Should you wish to discuss this submission in more detail, please contact myself or Sarah Wilson at the Consumers' Telecommunications Network on 02 9572 6007 or at ctn@ctn.org.au.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Teresa Corbin', with a stylized flourish at the end.

Teresa Corbin
CTN Chief Executive Officer

This submission was prepared by Teresa Corbin, CTN Chief Executive Officer, and Sarah Wilson, CTN Policy Advisor. It has been approved out of session by the CTN Board