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To: Committee Secretary
Senate Select Committee on the National Broadband Network
By email: broadband.sen@aph.gov.au
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National Broadband Network:

The Internet Society of Australia (ISOC-AU) welcomes this opportunity to provide the Senate Select Committee on the National Broadband Network with a summary of its submissions on the NBN made over the past two years.

ISOC-AU's fundamental belief is that the Internet is for everyone. We provide broad-based representation of the Australian Internet community both nationally and internationally from a user perspective and a sound technical base. We also consistently promote the availability of access to the Internet for all Australians. Because the Internet is a central driving factor in the demand for broadband, ISOC-AU has a direct interest in the outcomes of the arrangements that will underpin the provision of the NBN.

ISOC-AU applauds the Government's 2009 commitment to provide fibre to the premises, delivering speeds of up to 100 Mb/s for 90% of the population, and broadband using other technologies, delivering speeds of up to 12 Mb/s for the remaining 10% of the population. High speed broadband will be the main driver not only for new, faster communications services, but a critical factor in the delivery of Government services such as e-health and online education and training. It will also be a critical factor for innovation and economic growth in a digital economy.

ISOC-AU has consistently put forward its objectives, on behalf of Internet users, for broadband access connectivity that is:

- High quality and bandwidth;
- As symmetrical in upstream and downstream capacity as possible;
- Accessible to all Australians, wherever they reside or work;
- Meets communications needs of people with disabilities;
- Affordable; and
- Provided in a competitive environment that will give Internet users genuine choice of service and service provider, and provide the market forces to encourage improvements in services and pricing.

ISOC-AU has been providing its views on the NBN since the Government's call for submissions on regulatory arrangements for the NBN in April 2008. We have provided a submission on the Government's Request for Proposals documentation in June 2008, and further submissions on the regulatory framework in our submissions on the *Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill*

2009 and the Exposure Drafts of the *National Broadband Network Companies Bill 2010* and the *Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010*. We have also provided a submission to the NBN Co on its Consultation Paper of February 2010.

Together, these submissions provide our views on all aspects of the NBN: its topology and design, the competitive framework surrounding it and the protections that should be in place to ensure the NBN is available, accessible and affordable for all Internet users. The submissions are available either on our home page at www.isoc-au.org.au or, for earlier submissions, at www.isoc-au.org.au/Submissions/index.html.

1. NBN Regulatory Arrangements

Our first two submissions¹ focussed on regulatory arrangements for the NBN under the Government's original NBN fibre to the node policy. The submissions are in three parts: network topology, the regulatory framework and consumer protections.

1.1. Network Topology

In this discussion, we stressed that the topology of the network and the choices for interconnection methods are critical in supporting (or preventing) a robust competitive environment. Specifically, we argue that the network should be designed for:

- Support access to multiple simultaneous Service Providers
- Support for differentiated services with multiple quality requirements
- Performance and Reliability Standards for the NBN
- Symmetrical Speeds
- Capacity for implementation of IPv6

1.2. Regulatory Framework

At that time of these submissions, the proposed structure of the NBN and surrounding regulatory framework had not been finalised. What we called for was a more effective competition regime, including either a stronger operational/functional separation regime than was currently in place or, preferably, structural separation.

1.3. Consumer Protections

We specifically argued for the upgrading of broadband services to rural and remote Australia, and for both affordability and choice of services. We also argued that the proposed NBN Co should be subject to existing consumer protections. As we argue, broadband services should be available, accessible and affordable for all.

2. Proposed Legislation

We recognise that the *Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2009* has not been viewed as draft legislation directly concerning the NBN. However, it proposes a regulatory structure that will enhance the competitive environment during NBN's construction, and offers the possibility of stronger

¹ *National Broadband Network: Regulatory Reform for the 21st Century*, submitted to DBCDE June 2009, and *Regulatory Arrangements Associated with the National Broadband Network*, submitted to DBCDE August 2009.

consumer protections as well. The Exposure Drafts of legislation on the NBN Company and Access arrangements are more directly related to the NBN's regulatory framework.

2.1. Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2009

Competition regime: As set out in this submission, it is clear that the current competition regime has not worked to deliver a truly competitive environment that provides users with genuine choice. If Telstra does not provide undertakings on its structural separation, the Bill requires Telstra to at least provide undertakings on functional separation. As we noted, Telstra is now required to have in place an operational separation regime which clearly has not provided the competitive environment it was designed to, and our clear preference is for Telstra to structurally separate its fixed network from the provision of retail services. However, if Telstra chooses not to provide undertakings for its structural separation, we recommended (and continue to recommend) that:

The functional separation principles contained in the proposed Part 9 of Schedule 1 of the Telecommunications Act be considerably strengthened to ensure there is genuine separation of business units, genuine equivalence of offerings to all customers and sufficient mechanisms of transparency and accountability to ensure true functional separation.

Consumer Protections: While the regulatory arrangements are still not clear, we made specific recommendations in two specific areas:

- That there be public consultation before any changes are made to the definition of a standard telephone service (STS), including ensuring consumers are informed about the implications of their choosing to have a mobile or VoIP service as their STS; and
- That the Universal Service Obligation (USO) be redefined to set a minimum level of broadband service (including download limit) at a set price that should be available to all Australians or, if not available, provide a subsidy to ensure its availability.

Ministerial Discretion: We also expressed concern at the extent of Ministerial discretion in the Bill, particularly on consumer protection issues, and recommended the following:

Parts four to six of the Telecommunications Legislative Amendment (Competition and Consumer Safeguards) Bill 2009 be amended to require the Minister to release discussion papers on proposed changes to the Universal Service Obligation, the Customer Service Guarantee and Priority Assistance before a Ministerial Determination is made.

2.2. Exposure Drafts of the National Broadband Network Companies Bill 2010 and the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010.

Our primary concern with the NBN Co Bill is with the possibility of the Minister determining exemptions from the wholesale only open access requirement. Our specific recommendation, therefore, is:

That subsections 9(2)-(4) of the National Broadband Companies Bill 2010 be deleted. Alternatively, if the Communications Minister retains the power to create exemptions to the wholesale only requirements on NBN, the need for such

exemptions should be made clear, and the section significantly tightened so that exemptions can be made only in very limited, specific circumstances and where such a significant change to the wholesale access only policy can be justified.

Our concern with the Access Arrangements Bill is to ensure that only that part of the NBN that has not been exempted from wholesale open access arrangements could be exempted from requirements under Part XIC of the *Trade Practices Act 1974*. Specifically, we recommend:

that the Telecommunications Legislation Amendment (National Broadband Network Measures-Access Arrangements) Bill 2010 be amended so that only those services provided by the NBN Co to a carrier or carriage service provider can be exempted from competition requirements under Part XIC of the Trade Practices Act 1974.

3. NBN Consultation Paper: Proposed Wholesale Fibre Bitstream Products

In February 2010, NBN Co released a consultation paper seeking feedback on the construction and design of the NBN. Feedback was also sought on the implications for end users of issues raised by the NBN.

3.1. Layer 2 or Layer 3 Network

We expressed concern that, by the NBN restricting itself to a Layer 2 focus, the opportunities will be reduced to adopt optimal approaches to Internet security and ensuring the broadest possible access to innovative Internet services. Our ideal approach would be one where NBN Co provides layer 2, aggregated layer 2 and layer 3 services. As we argued:

In this way the financial barriers to entry into the broadband market will be reduced, and service providers could focus on the layers where true innovation is highest: services, applications and content.

3.2. Consumer issues

Our submission to NBN Co also identified a number of issues for users. Some of those issues are as follows:

- End users in Multi-Dwelling Units: It is now clear that NBN Co may provide fibre only up to the network boundary of a multi-dwelling unit, which leaves open questions of whether and/or how residents in individual units will have access to the 100 Mb/s speeds, and at what cost to each resident
- Unclear security: NBN Co is yet to determine the physical and electronic security regime under which its services will operate
- Optical Network Termination: The specific equipment NBN Co is intending to install on residences is yet to be chosen. It is not clear whether it will itself allow multiple retail service providers presenting across a single physical port, or whether local cabling will be owned by local providers, households or others. There is also no system of certifying household network cabling at this stage. Thus households may experience a range of performance levels.

- Lack of electrical power '*lifeline*' telephony services: Electricity cannot be transmitted over optical fibre. That means that the existing situation in which electricity can be sent over copper wire into people's homes in cases of emergency cannot be replicated in a fibre NBN. Back up power must be provided where it will clearly be needed in emergency situations (fire and police stations, hospitals, nursing homes, etc). There will also need to be an extensive education campaign so ensure members of the public are aware that their fixed phone service may no longer operate in emergency situations. Special provision will also need to be made for residences in which people with special health or other special needs.

We will be happy to provide any further comments on issues raised by our NBN submissions.

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