



Internet Society of Australia

A Chapter of the Internet Society

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ISOC-AU SUBMISSION ON FUTURE DIRECTIONS FOR THE DIGITAL ECONOMY

The Internet Society of Australia (ISOC-AU) welcomes this opportunity to provide comments on the Department of Broadband, Communications and the Digital Economy's (DBCDE) Consultation Paper: Digital Economy Future Directions.

ISOC-AU is a non-profit society founded in 1996 which promotes the Internet development in Australia for the whole community. ISOC-AU is a chapter of the worldwide Internet Society and is a peak body organisation, representing the interests of Internet users in Australia. We have a longstanding and ongoing commitment to the effective representation of these interests in self-regulatory processes in the telecommunications, domain name and Internet-related services industries.

The overall question being asked by the Consultation Paper is: 'How will we know when we have maximised the potential of Australia's participation in the digital economy?' The more specific questions asked in the Consultation Paper were largely from the perspectives of Government and Industry. ISOC-AU believes that the views of the Internet users must also be taken into account for the advancement of a truly digital economy.

Our response will cover two areas: the critical elements for the continued development of a digital economy (both broadband infrastructure and the concomitant requirements for ICT literacy and skills) and possible barriers for its growth from the perspective of the users of government and business services.

1. Introduction:

The importance of the Internet and ICT networks/services for the advancement of a digital economy were recognised in the OECD's 'Seoul Declaration' of June 2008, in the need to:

...promote the Internet Economy and stimulate sustainable economic growth and prosperity by means of policy and regulatory environments that support innovation, investment, and competition in the information and communications technology (ICT) sector..... The further expansion of the Internet Economy will bolster the free flow of information, freedom of

expression, and protection of individual liberties, as critical components of a democratic society and cultural diversity. (www.oecd.org/document/)

Indeed, the Australian Communications and Media Authority's (ACMA) latest report shows Australians are continuing to 'increase their participation in the digital economy' through the use of ICT, increasingly migrating towards higher Internet speeds, increasing their online content use and, finally, the increasing use of the Internet as a vehicle for commerce. (ACMA, Communications Report 2007-08 p. 45-54) (ACMA Report at www.acma.gov.au). These trends must continue for the development of a flourishing digital economy.

2. Critical Elements

2.1 Broadband Infrastructure

ISOC-AU has long argued for high speed quality broadband that is IPv6 compatible as a necessary platform, that is accessible and affordable for all Australians, and provides users with a choice of service provider (see ISOC-AU's submission on the Regulatory Arrangements Associated with the National Broadband Network at www.isoc-au.org.au).

ISOC-AU strongly welcomed the Government's commitment to the provision of high speed broadband to 98% of Australians that is to be laid down over the next five years. Recent reports indicate, however, that a significant number of Australians do not now have access to high speed broadband. In its recent Report, ACMA said that, of a total of 7,228 million Internet subscribers, over 1.58 million (22%) were still using speeds of less than 256kbit/s (ACMA Report p. 47). The Government's latest report on Australian's use and satisfaction with e-Government services also points out that only 68% of Australians had access to broadband in 2008. (AGIMO, Interacting with Government: Australian's Use and Satisfaction with e-government services, December 2008) (AGIMO Report available on www.agimo.gov.au)

As the NBN is rolled out, the Government must also ensure that it includes full capacity for implementation of IPv6, a platform for transition keeping Australia abreast of international developments and for innovation.

One important metric for maximising the potential of Australia's participation in the digital economy must be the availability of minimum broadband speeds to all Australians. Another important metric for innovation must be the extent to which the NBN is IPv6 compatible.

2.2 ICT Literacy and Skills

Another critical element for the digital economy is the development of ICT digital literacy and media literacy skills for all Australians. Indeed, in its 'Ten Year Strategic Vision for the Australian Information and Communications Technology Sector', two of the ten components identified as vital by the National IT Industry Alliance were ICT skills and ICT Literacy. (www.nictia.org.au).

The basic view of digital literacy in the discussion paper should be broadened to encompass both OECD and Australian definitions of digital literacy which are

more robust than having basic level technical skills. For example, in Australia a more robust definition of digital literacy, as defined in the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) (2005) National Assessment Program Information and Communication Technology Literacy Years 6 and 10. An Assessment Domain for ICT Literacy (www.mceetya.edu.au/verve/resources/ICT_assessment_domain_file.pdf) is seen as :

the ability of individuals to use ICT appropriately to access, manage, integrate and evaluate information, develop new understandings, and communicate with others in order to participate effectively in society.

However, the focus on digital media literacy and the capacity to remix, create and produce digital information in diverse formats is well made although not widely acknowledged in education and business circles. The ACMA Digital Media Research program is strongly acknowledged and supported by the ISOC-AU.

The Consultation Paper points to the need for ‘... promoting technology-focused training at the vocational and tertiary levels’ (p. 10). However, research from the UK, USA and Australia indicates that ICT literacy and media literacy are embedded from an early age. Emphasis on digital and media literacy should commence with early schooling and become part of the everyday fabric of learning, entertainment, business and innovation. An emphasis at vocational and tertiary levels, although important, is insufficient. In addition, research evidence from the UK draws strong conclusions that children of families that provide access to computers at home achieve stronger performance in digital literacy and learning than those individuals from families that do not have ICT access.

Metrics of achievement towards improved digital literacy must be developed if gaps in attainment are to be identified. Basic household and education/business audits of access to ICT on an annual basis are important to identify areas of special focus or gaps, non and low access to computers, technical and other barriers. These audits should include identifying barriers to access for people with disabilities and remote users as well as other important equity issues.

On a more sophisticated level there is a need to research and identify the changes that are occurring in learning programs, business practices and social interaction if Australia is to capitalise on innovation, achievement and increased production in the knowledge age.

3. User Needs in Digital Economy

The AGIMO Report provides valuable insights into concerns people have in their interaction with e-government services. Those insights are equally valuable in identifying why people may not participate as fully as they might in a digital economy. As identified above, two critical reasons are lack of access to broadband services and the lack of ICT literacy and skills to participate fully online. Those other reasons include affordability of access, accessibility of services for people with disabilities, website design and content so that people can easily locate information that should be available, concerns about privacy and security, and processes that do not permit transactions online.

3.1 Affordability

The Government's *Request for Proposals to Roll Out and Operate a National Broadband Network (NBN) for Australians* (DBCDE, April 2008) included in its objectives that it enable low access prices (Clause 11) so that uniform retail prices are available throughout Australia. As well as the ISOC-AU submission on the Regulatory Arrangements Associated with the National Broadband Network, submissions from other consumer/user groups, including the Consumers' Telecommunications Network, the Australian Telecommunications Users Group, TEDICORE, the Royal Society for the Blind and Vision Australia, emphasised the need for an NBN that is available to all Australians at a price they can afford.

The Broadband Guarantee Scheme, which has been continued under this Government, provides a subsidy for those Australians who do not have access to a minimum level of broadband, with a minimum download requirement, at an affordable price.

An important metric must be the availability of broadband services to all Australians at a benchmark level of affordability that takes into account the cost of a reasonable level of downloads. For areas where affordable broadband services are not available, another metric should be the extent to which subsidies are available to promote affordable access to broadband.

3.2 Accessibility

Another issue identified in the AGIMO Report was the number of people with a disability who had difficulty in using the Internet, particularly people with physical disabilities and people with sensory and speech difficulties (p. 105). The Australian Bureau of Statistics (ABS) also bear out that Australia has an aging population, that will also start to have functional limitations that may restrict their continued participation in the digital economy (For example, the median age of the population has risen by 5.3 years over the past two decades (now at 36.9 years and is expected to rise to 46.7 by 2050 – see the ABS Report 3201 Population by Age and Sex, January 2008, at www.abs.gov.au). The World Wide Consortium has developed accessibility standards to ensure that, as far as possible, people with disabilities can access the Internet (see www.w3c.org). It should be noted that *ITWire* of 5 February 2009 quoted a UsabilityOne report finding that 12 Australian Government websites did not meet even the lowest level of accessibility required by the W3C accessibility guidelines.

There are a number of assistive technologies that aid in accessing the Internet and the provision of these should be subsidised to increase the population's participation in the digital economy.

One metric for the accessibility of websites should be compliance with the W3C accessibility guidelines. Another metric should also look at the availability and affordability of assistive technologies that will ensure that people with disabilities can use the Internet.

3.3 Website Information

Another issue identified by the AGIMO report was concern by a significant number of respondents about government information websites. The biggest concern was that that information they felt should have been on the relevant site simply was not there. The second largest area of concern was that the website was too hard to either use or understand. There should be metrics developed for website design to ensure that public information is both available and easily found online. (p. 106)

An important metric that should be developed is whether websites are easy to use (in addition to accessibility issues), and the extent to which relevant information is available.

3.4 Privacy

Privacy was also raised in the AGIMO report as an issue for people transacting online, including those who would like to transact anonymously where it is reasonable to do so. The Australian Law Reform Commission has recently released its report into Australian privacy law, *For Your Information: Australian Privacy Law and Practice* that makes a number of recommendations relating to the Internet. (www.alrc.gov.au) The Department of Prime Minister and Cabinet is reviewing the Report's recommendations and expects to have responded to the recommendations on new technologies and the Internet within the year.

Once the Government's response to the ALRC report is finalised, metrics should be developed to reflect Government decisions on privacy reform, including the extent to which the public can transact anonymously where it is reasonable to do so, and the extent to which personal information that is collected by a Government agency or organisation is restricted to that which is necessary for the individual transaction.

3.5 Security

Another important issue raised by the AGIMO Report was concern some Internet users have with security of their transactions on the Internet. Without user confidence in the security of electronic transactions, participation in the digital economy will not progress. The security issue was highlighted by, for example, a paper prepared by the OECD as background for its 2008 meeting on the Internet Economy: OECD report *Malicious Software (Malware): A Security Threat to the Internet Economy* (OECD Ministerial Background Report DSTI/ICCP/REG(2007)5/FINAL – available on the OECD website www.oecd.org)

There are a number of Australian Government areas dealing with this issue including the Attorney-General's Department, DBCDE and, as the regulator with responsibility for communications, ACMA. Australian Government agencies also cooperate with international law enforcement agencies and organizations such as the OECD and ICANN on security issues.

Metrics should be developed on policies and processes undertaken for network security, and their success rate. Another set of metrics could measure public awareness of available measures for safer use of the Internet and their take up.

Metrics could also cover the effectiveness of ACMA public education campaigns on e-security.

3.6 Transacting electronically

Another barrier for e-commerce, as noted in the AGIMO Report, was that, in some cases, Government processes in question required attendance in person rather than an online transaction. With the passage of the Electronic Transaction Act in 1999, 'signing' a document can be done electronically as well as in person, and both government and business processes should be adjusted to facilitate as many processes as possible able to be securely completed online.

4. Conclusion

Any metrics developed to determine whether this Government has 'maximised the potential of Australia's participation in the digital economy' must include metrics that focus on user issues is participating in the digital economy. They must first measure access all Australians have to the Internet . They must also measure possible barriers people have in using the Internet, including the accessibility and usability of websites, processes that to not allow electronic participation and the extent to which people's concerns with security and privacy are addressed in the online environment.

Yours sincerely

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