

**Senate Standing Committee on Environment, Communications and the Arts**  
**Answers to Senate Estimates Questions on Notice**  
**Supplementary Estimates Hearings October 2010**  
**Broadband, Communications and the Digital Economy Portfolio**  
**Department of Broadband, Communications and the Digital Economy**

**Question No: 100**

**Program No. 1.2**

**Hansard Ref: EC 110**

**Topic: Benefits of NBN – Public Information and education Campaign**

**Senator Birmingham asked:**

In relation to the 14 people engaged to educate communities about the benefits of the NBN; can you provide details of who they are and where they are based? Can you provide an outline of where the Department is at with the actual recruitment of these 14 people?

**Answer:**

On 2 November 2010, the department wrote the Senate Standing Committee Secretary to correct Hansard.

The correct answer is that there are eight Regional Broadband Coordinators in total providing public information on the National Broadband Network. The fourteen officers relate to other local activities supporting digital switchover. The Digital Switchover Taskforce provides funding to local organisations to employ Digital Switchover Liaison Officers and by the end of 2010, it is expected that fourteen will have been employed.

Regional Broadband Coordinators.

As at 2 November 2010, the Department had completed recruitment of seven Regional Broadband Coordinators to work with local communities along the Regional Backbone Blackspots Program routes covering approximately 6000 km, 100 regional locations and around 395,000 residents. A further two coordinators are expected to be recruited by the end of November 2010.

Details of the Regional Broadband Coordinators are as follows:

1. Mr Tony Robinson is based in the offices of the Central Highlands Development Corporation in Emerald. Mr Robinson is dedicated to the Emerald, Longreach and Mt Isa (QLD) route which includes Barcaldine, Jericho and Bogantungan;
2. Mr Ryan Williams is based in the darling Downs and South West Regional Development Australia Office (QLD). Mr Williams is dedicated to the Toowoomba to Arcadia route which includes Gunnewin, Roma, Chinchilla, Apunyal, Dalby and Oakey;

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3. Ms Marina Mossman is based in the Darwin Regional Development Australia Office. Ms Mossman is dedicated to the Darwin to Queensland border route (NT) which includes Katherine and Tenant Creek;
4. Mr Stephen Pykett is based in the offices of the Bass Coast Shire Council. Mr Pykett is dedicated to the South West Gippsland route (VIC) which includes Wonthaggi, Inverloch, Korumburra, Leongatha, Koonwarra, Foster, Yarram, Woodside and Sale;
5. Mr Chris Gregory is based in the Adelaide Hills, Fleurieu and Kangaroo Island Regional Development Australia Office in South Australia. Mr Gregory is dedicated to the Victor Harbour region route which includes Mt Barker, Strathalbyn, Goolwa, Port Elliot, Wilunga and McLaren Vale;
6. Mr David Penfold is based in the Barossa Regional Development Australia Office in South Australia. Mr Penfold is dedicated to the Gawler to Renmark route which includes Tanunda, Angaston, Nuriootpa, Kapunda, Waikerie, Barmera and Berri;
7. Ms Judithe Lovick-andrews is based in the Mildura Development Commission in Victoria. Ms Lovick-andrews is dedicated to the Shepparton, Mildura and Broken Hill route (NSW/VIC) which will include Robinvale, Swan Hill, Kerang, Cohuna, Torrumbarry, Echuca, Kyabram and Mooroopna; and
8. Recruitment is underway for the Geraldton to Perth route (WA) which will include Bluff Point, Dongara and Port Denison.

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**Question No: 101**

**Program No. 1.2**

**Hansard Ref: EC 114**

**Topic: NBN and the contribution to economic productivity**

**Senator Troeth asked:**

Can you provide a list of studies across the globe that have highlighted the benefits of broadband?

**Answer:**

The following list comprises a representative range of recent local and international studies which have highlighted the benefits of high speed broadband:

**Australia:**

Centre for International Economics (2008), *Impact of Genuine Broadband for Australia*.  
<<http://www.thecie.com.au/content/news/Impact%20of%20genuine%20broadband.pdf>>

Access Economics (2009), *Impacts of a national high-speed broadband network*,  
<<http://www.apo.org.au/research/impacts-national-high-speed-broadband-network>>

Booz and Co (2009), *Digital Highways: the role of Government in 21<sup>st</sup> Century Infrastructure*,  
<[http://www.booz.com/media/file/Digital\\_Highways\\_The\\_Role\\_of\\_Government\\_in\\_the\\_21st\\_Century\\_Infrastructure.pdf](http://www.booz.com/media/file/Digital_Highways_The_Role_of_Government_in_the_21st_Century_Infrastructure.pdf)>

Access Economics (2009), *The economic benefits of intelligent technologies*,  
<<http://www.accesseconomics.com.au/publicationsreports/getreport.php?report=201&id=257>>

Access Economics (2010), *Financial and externality impacts of high-speed broadband for telehealth*,  
<<http://www.accesseconomics.com.au/publicationsreports/showreport.php?id=242&searchfor=Economic%20Consulting&searchby=area>>

Access Economics (2010), *Impacts of Teleworking under the NBN*,  
<<http://www.accesseconomics.com.au/publicationsreports/showreport.php?id=240>>

**Organisation for Economic Co-operation and Development (OECD):**

OECD (2007), *Broadband and the Economy*, Ministerial Background report,  
<<http://www.oecd.org/dataoecd/62/7/40781696.pdf>>

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OECD (2008), *Developments in fibre technologies and investment*  
<<http://www.oecd.org/dataoecd/49/8/40390735.pdf>>.

OECD (2009), *The Role of Communication Infrastructure Investment in Economic Recovery*,  
<<http://www.oecd.org/dataoecd/4/43/42799709.pdf>>

OECD (2009), *Network Developments in Support of Innovation and User Needs*  
<[http://www.oecd.org/officialdocuments/displaydocumentpdf?cote=DSTI/ICCP/CISP\(2009\)2/FINAL&doclanguage=en](http://www.oecd.org/officialdocuments/displaydocumentpdf?cote=DSTI/ICCP/CISP(2009)2/FINAL&doclanguage=en)>

**USA:**

J. Orszag, M. Dutz and R. Willig, (2009), *The Substantial Consumer Benefits of Broadband Connectivity for U.S. Households*,  
<[http://internetinnovation.org/library/consumer\\_benefits\\_broadband\\_study/](http://internetinnovation.org/library/consumer_benefits_broadband_study/)>

S. Ezell, R. Atkinson, D. Castro and G. Ou (2009), *The Need for Speed: The Importance of Next-Generation Broadband Networks*,  
<<http://www.itif.org/files/2009-needforspeed.pdf>>

Berkman Center for Internet and Society at Harvard University (2010), *Next Generation Connectivity: A review of broadband Internet transitions and policy from around the world*, Study for the Federal Communications Commission,  
<[http://www.fcc.gov/stage/pdf/Berkman\\_Center\\_Broadband\\_Study\\_13Oct09.pdf](http://www.fcc.gov/stage/pdf/Berkman_Center_Broadband_Study_13Oct09.pdf)>

Federal Communications Commission (2010), *The National Broadband Plan*.  
<<http://www.broadband.gov/plan/>>

Federal Communications Commission (2010), *Health Care Broadband in America*.  
<[http://download.broadband.gov/plan/fcc-omnibus-broadband-initiative-\(obi\)-working-reports-series-technical-paper-health-care-broadband-in-america.pdf](http://download.broadband.gov/plan/fcc-omnibus-broadband-initiative-(obi)-working-reports-series-technical-paper-health-care-broadband-in-america.pdf)>

H. Singer, J. West (2010), *Economic Effects of Broadband Infrastructure Deployment and Tax Incentives for Broadband Deployment*,  
<<http://www.ftthcouncil.org/sites/default/files/Singer-West%20FTTH-C-1.pdf>>

**Europe:**

M. Fornefeld, G. Delaunay and D. Elixmann (2008), *The Impact of Broadband on Growth and Productivity*, a study by MICUS on behalf of the European Commission.  
<[http://ec.europa.eu/information\\_society/europe/i2010/docs/benchmarking/broadband\\_impact\\_2008.pdf](http://ec.europa.eu/information_society/europe/i2010/docs/benchmarking/broadband_impact_2008.pdf)>

Frontier Economics (2010), *The impact of broadband in Eastern and Southeast Europe*, prepared for Telekom Austria Group  
<<http://www.telekomaustria.com/presse/news/2010/broadband-study.pdf>>

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R. Katz, S. Vaterlaus, P. Zenhäusern and S. Suter (2010), “The impact of broadband on jobs and the German economy”, *Intereconomics* Volume 45, Number 1, 26-34.  
<<http://www.springerlink.com/content/77425641451004p0/>>

P. Koutroumpis (2009), “The economic impact of broadband on growth: A simultaneous approach”, *Telecommunications Policy*, Volume 33, Issue 9.  
<<http://www.canavents.com/its2008/abstracts/102.pdf>>

LECG (2009), *Economic Impact of Broadband: An Empirical Study*,  
<[http://www.connectivityscorecard.org/images/uploads/media/Report\\_BroadbandStudy\\_LECG\\_March6.pdf](http://www.connectivityscorecard.org/images/uploads/media/Report_BroadbandStudy_LECG_March6.pdf)>

i2 media research limited, prepared for Ofcom, UK (2010), *Next Generation Services for Older and Disabled People*,  
<<http://www.ofcom.org.uk/files/2010/09/ACOD-NGS.pdf>>

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**Question No: 102**

**Program No. 1.2**

**Hansard Ref: In Writing**

**Topic: Internet Filter**

**Senator Birmingham asked:**

- (a) I'd like to ask about the internet filter. A report by the Department of Broadband and Communications in 2004 noted the initial set-up cost of ISP-level filtering would be over \$45 million plus an additional \$33 million per annum for ongoing costs. Can you guarantee that the costs of installing ISP-level filtering will not be passed down on the consumer?
- (b) The Government has kept the public in the dark over the detail of the legislation for this proposed internet filter. Will the public be informed exactly what content you intend to filter? Will the filter deal only with child pornography or will other RC material considered offensive be included?
- (c) Can you give an unconditional guarantee that the proposed mandatory internet filter will not block material legal to view under Australian law?
- (d) The Government has claimed the filter will not slow the internet down, based on the trials conducted. Pilot tests were based on an internet speed of 8 megabits per second and your framework stated you would test up to 12mbps. Can you guarantee a mandatory ISP-level filter operating on the NBN fibre speeds of 100 megabits per second and wireless speeds of 12 megabits per second would not slow the internet down?
- (e) Pilot tests conducted by Enex and Telstra both confirmed that the filtering of high-volume sites such as YouTube, Facebook, Twitter, and Wikipedia would not work. Enex stated filtering would, and I quote: "Cause additional load on the filtering infrastructure and subsequent performance bottlenecks." What is the point of implementing a mandatory ISP-level filter that fails to operate on the sites most frequented by children?
- (f) How do you answer claims from Google which state, and I quote, "the filtering of material from high-volume sites appears to not be technologically possible, as it would have such a serious impact on internet access speeds"? Will you attempt to filter high-volume sites such as YouTube, Facebook, and Twitter at the sake of internet speed, and if not, are you serious about protecting children or more interested in holding on to a deeply flawed and ineffective policy?
- (g) The report on the trials state that "stronger circumvention prevention measures can result in greater degradation of internet performance." Telstra did not even attempt to measure the impacts on performance a circumvention prevention measure would have as it "considers that filtering can be circumvented by a technically competent user." A joint

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statement by Google, Yahoo, iiNet, and Internode among others stated most harmful content online is shared through peer-to-peer networks, which the filter does not capture. Why is the Government still pursuing this policy?

- (h) What is the Department's response to comments by Sydney University lecturer Bjorn Landfeldt that there is no evidence the filter will, and I quote: "be effective in putting any serious dent in the availability of such content on the internet"?
- (i) What research has the Government conducted to confirm that blocking a list of URLs will actually reduce the availability of prohibited material, rather than simply encouraging moves to alternative mediums?
- (j) The report on the internet filter trial by Enex stated, and I quote "Enex considers it unlikely that any filter vendor would achieve 100 per cent blocking of the URLs inappropriate for children without significant over-blocking of the innocuous URLs because the content on different commercial lists varies and there is a high rate at which new content is created on the internet." How will the Government avoid over-blocking?
- (k) The Government has claimed that similar internet filters as the one proposed are in use in Europe. Yet no other democracy has mandatory ISP-level filtering and current systems in the EU are voluntary for ISPs. A report into the filter by Professor Catherine Lumby states the filtering regime of the EU "requires interaction between governments, police, advocacy groups and the general public who identify instances of undesirable content, and the ISPs who voluntarily filter such content on the understanding that any failure to do so is likely to result in greater regulation of the sector." Is this correct?
- (l) Why hasn't the Government explored the evidence-based approach of other western liberal democracies and consider an industry self or co regulatory approach?

**Answer:**

- (a) ISPs in many countries around the world have voluntarily implemented filtering without financial assistance from government and without additional costs being passed on to consumers.
- (b) The Government has made it very clear that mandatory filtering will only involve specific URLs that have been assessed as Refused Classification (RC) using criteria set out in the National Classification Scheme following a complaint from the public to the Australian Communications and Media Authority (ACMA). This will be specified in the legislation when it is introduced.

RC material includes child sexual abuse imagery, bestiality, sexual violence, detailed instruction in crime, violence or drug use and/or material that advocates the doing of a terrorist act.

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URLs of child sexual abuse imagery obtained from lists maintained by highly reputable overseas agencies will also be blocked, following a detailed assessment by the ACMA of the processes used to compile those lists.

- (c) See response to (b). Refused Classification content which consists of child sexual abuse material is illegal to possess or access. Under Australia's existing classification regulations, all RC content is illegal to exhibit, distribute, sell or make available for hire. The mandatory ISP filtering policy is attempting to align, to the extent practicable, treatment of RC material online with its treatment offline.
- (d) Consultations with ISPs and expert technical advice confirm that ISPs with network speeds in excess of 8 megabits per second (mbps) would be able to choose a technology that filters a defined list of URLs with no, or negligible, impact on network speeds.

ISPs in a number of overseas countries have successfully implemented filtering of a defined list of URLs with no noticeable impact on internet speeds. It is understood that British Telecom's filtered network operates well in excess of 8 mbps.

- (e) The policy intention of mandatory ISP filtering is to ensure Australians do not inadvertently access RC material which has been the subject of a complaint to the ACMA.

Owners of most popular overseas-hosted, high usage websites have 'conditions of use', including arrangements to take down offensive material (including that which would reach the RC-rated threshold). Such sites actively remove child abuse material when identified by their users.

We are in consultation with operators of popular overseas sites, to either take down identified RC-rated content or to block it from access by internet protocol (IP) addresses in Australia.

- (f) See response to (e).
- (g) The Government's mandatory filtering policy is aimed at preventing inadvertent access to overseas hosted RC material and sends a clear message that accessing such content is not appropriate in a civilised society.

Existing legislation requires websites hosted in Australia to take down all material which following a complaint to the ACMA is classified RC and for which the ACMA has issued a take down notice. This policy seeks to align, to the extent possible, the treatment of overseas hosted material with content hosted in Australia.

- (h) The Government recognises that filtering is not a stand-alone solution to cybersafety. It is, however, part of a suite of measures to help reduce the risk to internet users, particularly children, of being inadvertently exposed to RC material. The Government considers any reduction in the availability of such material is important.



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- (i) See response to (g) and (h). The Government has allocated significant additional resources to the Australian Federal Police for the detection and investigation of child sexual abuse on the internet and other mediums.
- (j) The quote from the Enex TestLab report refers to filtering of additional categories of online content in a voluntary scheme, undertaken by some ISPs during the live pilot, whereas under the Government's mandatory filtering policy, only RC material would be blocked.

The ISP filtering live pilot involving nine ISPs of varying sizes demonstrated that filtering a defined list of URLs can be done with 100 per cent accuracy and negligible impact on internet speed.

- (k) It is correct that ISPs in Europe are successfully using internet filters today.

In the UK, British Telecom (BT), one of the UK's largest ISPs, provides a filtered service at a wholesale level as well as on a retail basis. Filtering is undertaken using the Internet Watch Foundation (IWF) list of URLs. While the size of this list fluctuates, it usually contains around 1000 URLs of child sexual abuse material.

Filtering is undertaken voluntarily by other ISPs in the UK, with over 95 per cent of residential broadband connections in the UK filtered at the ISP level.

In Denmark, all major ISPs voluntarily participate in a scheme covering around 98 per cent of that country's internet subscribers. The list used by Danish ISPs is a compilation of hotline reports of child sexual abuse material.

The Finnish Government enacted a law in 2007 that gives telecommunications companies the right to block access to child sexual abuse material. It is reported that the majority of ISPs in Finland now take part in the scheme, covering at least 80 per cent of the total ISP market.

In Norway, the National Criminal Investigation Service maintains a list of around 1000 active domain names which contain child sexual abuse material. All major ISPs and mobile phone network operators in Norway filter the list. It is estimated that the participating ISPs cover around 95 per cent of Norwegian internet subscribers.

In Sweden, it is reported that approximately 15 ISPs voluntarily filter a list of child abuse material. Around 85 per cent of Swedish internet subscribers are covered by these ISPs.

Whether this is undertaken as a voluntary or mandatory system has no effect on the technical capability.

- (l) The Government has been encouraging industry to adopt ISP level filtering for some time, however until recently ISPs in Australia have been unwilling to do so voluntarily.

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Telstra, Optus and Primus have now undertaken to voluntarily block a list of child abuse URLs supplied by the ACMA. These ISPs account for over 70 per cent of internet users in Australia. Some of these ISPs continue to call for a mandatory scheme.

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**Question No: 103**

**Program No. 1.2**

**Hansard Ref: In Writing**

**Topic: Satellite Phone Subsidy Scheme**

**Senator Fisher asked:**

- a) How many people have accessed a grant under the satellite phone subsidy scheme to date broken down year by year?
- b) What percentage of the Australian population are currently eligible to access the satellite phone subsidy scheme?
- c) Is this the same percentage of Australians who will be serviced by the NBN through a satellite only connection?

**Answer:**

- a) Numbers of subsidies provided under the Satellite Phone Subsidy Scheme to date, broken down year by year, are as follows:  
2002/03-795  
2003/04-1,298  
2004/05-2,299  
2005/06-3,206  
2006-07-1,896  
2007/08-1,434  
2008/09-1,398  
2009/10-1,578  
2010/11-551 (as at 31 October 2010)
- b) The Satellite Phone Subsidy Scheme does not target a defined percentage of Australians. Eligible Australian citizens, permanent residents or registered organisations are able to apply if, amongst other criteria, they live or operate a business in an area of Australia without terrestrial mobile phone coverage; or if they live or operate a business in an area that has terrestrial mobile phone coverage but spend a substantial amount of time in an area where terrestrial mobile phone coverage is not available.
- c) No