

2009

Senator Kate Lundy

[PUBLIC SPHERE 1: HIGH SPEED BANDWIDTH BRIEFING PAPER]

This Briefing Paper is an overview of the perspectives and discussions from the Public Sphere on High Speed Bandwidth. The public consultation, event and reporting of outcomes was facilitated by Senator Kate Lundy as an initiative to encourage more open consultation for public Policy. The next Public Sphere is on the topic of Open Government. All details at Senator Lundy's website: <http://www.katelundy.com.au/>

Public Sphere 1

Topic: High Speed Bandwidth for Australia

This topic was around what high bandwidth can do for Australian society, business and government. It was not to cover the recently announced National Broadband Network or implementation details for high bandwidth in Australia.

The report is made up of three parts:

- Topic Briefing - the basic perspective gathered through the Public Sphere are collated, and links available for further reading
- Event Briefing - information about the event itself, participants and media/blog coverage

Public Sphere briefing papers will be assimilated publicly on a wiki and we welcome collaborators to the process to participate.

- Recommendations resulting from the Public Sphere topic contributions

We've also added a "Lessons Learned" section for the improvement of the Public Sphere process.

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Topic Briefing

This briefing overview is a culmination of the ideas and challenges discussed as part of the Public Sphere topic. It is derived from blog comments and links, Twitter discussion, and the speeches presented at the workshop. Future briefing papers will be collated on a wiki for more open participation in this part of the Public Sphere process.

Delivery of Online Services

Tele/e-Health and remote connectivity

[TeleHealth](#) was discussed (Duncan Stephenson), and a case study was provided plus supporting documentation (<http://www.ict.csiro.au/page.php?cid=24>). One of the findings was that although there were concerns about the ability to deliver health services without touching patients, it worked quite well in practice.

It was discussed how high speed bandwidth can assist greatly with the delivery of services (basic and specialist) to remote and regional Australia, and how the current delivery of health services is a significant effort for families in remote areas. On this topic it was mentioned that there isn't enough current understanding of the different conditions facing remote and regional Australia, and an example was given of the QLD government providing videos on saving water, which can't be watched in remote areas due to slow Internet access (Nerida Hart).

People were quite interested in this area, and it appears to be a bleeding edge area.

Video Communications

The opportunities around the capacity to deliver quality video was discussed (Silvia Pfeiffer). Specific examples were the health industry and sports. There was a lot of detail in a [blog post](#) contributed to the website about technical considerations and social considerations around en-mass video delivery, and it brings up the importance of open source and open standards (such as video codecs) for better interoperability and lower costs of delivering video online.

Education

One of the blog comments spoke about the opportunities for education, in particular the "delivery of equitable education services to all students" (Colin Wood). An example was given where high speed networks can really help for VET apprentice training, for instance - an auto mechanic demonstrating a skill (Janet Hawtin). She also spoke about the need for fast and cheap Internet access to schools, and the importance of school peer-to-peer networks for enabling better collaboration between schools and students. The importance of improving ICT skills to leverage the benefit of high speed Internet access was mentioned by a few people.

Entertainment

There was a comment on the blog about typical household uses of high speed internet access, including entertainment and education (Sakari Mattila).

Sports

Keith Lyons linked commentary about how high speed internet access could improve public engagement in and access to sports, as well the improving methodologies for elite sports training. Tools such as social networking can also help people engage in sports, and collaborate outside the actual sports events (eg - <http://remotehockey.ning.com/>).

Local content

Comments, Tweets and speakers mentioned issues such as the metering of content and how it is as expensive to download locally hosted content even though the real cost of downloading content from the US is not transparent to the user, and as such is subsidised making locally hosted content more expensive in real terms.

Basically several of the sphere participants were concerned that without some industry reform, local content would continue to not be competitive even though in real terms it is cheaper to deliver. Another related example was given about Hulu, a video streaming service which is very successful in the US, and got stonewalled in Australia because they were told they didn't own the content rights (Silvia Pfeiffer). It was suggested new business models for content need to be developed.

Also, it was mentioned that the big ISP's don't facilitate peering which would make faster and cheaper access to the content, therefore making it more expensive for the clients of those ISPs to get local content. Peering is an additional cost for ISPs, however an example of a cooperative approach to peering is PIPE Networks - <http://pipeinternational.com/>.

Delivery of high speed capacity

Cost of high speed service - this came up quite a few times, if the costs are not reasonable, than Australian's will not fully utilise the high speed capacity. There was a talk about how Cooma already has had a FTTP network implemented, and this raised the question as to whether the NBN could be rolled out more cost effectively than current estimates (Adrian Blake).

Also, access to high speed Internet access would greatly assist rural and regional areas, and it will be a challenge to ensure rural and regional areas are able to be competitive with metropolitan areas. There was a presentation specifically covering the challenges that currently face people in regional and rural areas (Nerida Hart).

Meeting global standards in Government services delivery

New standards are being set in this area, and examples were given about some of the Gov 2.0 successes in Canada (Michael De Percy) where online interactive engagement has been happening for 10 years. Australia must try to get to the forefront of this area so the Government can deliver quality and competitive services to the public and private sectors (locally and abroad), as well as enable better collaboration with other Governments.

It was suggested that perhaps it was due to a "culture of fear" in Australia that we are too risk averse to experiment and as such to move ahead.

There was a lot of discussion about the Canadian experiences, general desire to move Australia ahead, and frustration at the Australian government and policies that are seen to be getting in the way of innovators. See the section on Open Government for more details.

IPV6

IPV6 was mentioned (Janet Hawtin, and one or two speakers) as an important element in high speed internet access.

Industry competition issues

Several people commented (in blog comments, talks, Twitter and by private email) on the lack of robust and open competition in this space presently, and how if some of these issues were not addressed, than the opportunities for innovation and new markets would be significantly diminished. The concern was that a high speed network would not add significant tangible benefits without industry evolution to a more free market.

Green ICT

Power and heat

A few presenters and participants spoke about Green ICT options (Tom Worthington, Judy Anderson and James Purser). Green ICT considerations, including low power/heat devices, using ICT for better city/transport planning (for green outcomes), the impact of mobile computing, SMART grids and the environmental and social impact of telecommuting were discussed.

Telecommuting

Telecommuting was not only spoken about but demonstrated on the day by two of the presenters who sent pre-recordings rather than physically attend the Public Sphere, online collaboration was discussed at length (James Purser), as well as how the "office" will change as people will be working more from home in a "virtual office". It was discussed how high speed networks better enable such an environment and other ways to collaborate online.

Smart city planning

Smart city and infrastructure planning in line with digital economy goals was discussed (Judy Anderson). Examples such as new theatres in schools being digitally and technologically enabled, and rather than new roads being just roads, they can integrate with transport management systems. It was suggested digital enablement of transport systems amongst other infrastructure planning can result in productivity gains and carbon reduction. Examples were given of countries like India leapfrogging Australia in this area.

Open Government

Online engagement

Several speakers and participants spoke about the opportunities around public engagement in the political process. The "many failings" of both the government and general public in Australia to engage openly was discussed (Stephen Collins), and it was suggested that what people want is an "engaged, two-way and ongoing conversation with both politicians and the public sector".

It was suggested that unless Australian government gets engaged with the public, then the result will be an even more "disconnected and apathetic electorate than we have now". It was also brought up that in Australia there is quite low public engagement generally, and people need to get coordinated, however in Canada the government better facilitates public participation (Michael De Percy). The point was made that politicians in particular must engage in a genuine way (it must be clear who is talking) but also must engage with people, with the questions being asked (Stephen Collins).

It was also mentioned that there are problems in Government agencies' approaches to social networking tools, and case studies were presented of colleagues who need to use Facebook to access lobby groups, but the site is blocked at work, so the colleague has to work at home after hours (Nerida Hart). There is a strong interest by some members of the public service to use wiki's, blogs and podcasting to interact with the public, but because their supervisors are unfamiliar and concerned about these new communication tools, and politicians need to "control the message" coming out of the public service, such interaction is usually disallowed (Paul Dalby).

Talks in this area were well received by the audience on twitter on face to face. Several comments on the blog and Tweets echoed the sentiment of the importance of social engagement. There were also comments on the blog about this, saying "A challenge is to work out ways of consolidating discussions so that we do not have to connect with everyone but there are consolidation and filtering mechanisms to allow the "best" ideas to emerge" (Kevin Cox).

Open data and standards

Several speakers spoke at length about how faster network access must be complemented with a strategy around better access to government data such that commercial interests and the general public (let alone other government agencies) can leverage the data to create new value (Craig Thomler and James Dellow).

It was suggested that open access strategies must include open protocol standards (to ensure systems interoperability), open data formats (to ensure application interoperability), appropriate permissive copyright (to ensure appropriate rights to reuse) and open workflow (to ensure the data is not locked up behind bureaucratic processes). It was also commented that open approaches (APIs, standards, licenses) are important to enabling citizen reuse and mashup (value add) of Government data (Janet Hawtin). There is still a view in some sections of government that holding data gives them both power and the possibility of renting this data for income.

Participants mentioned the value of public and industry access to data. Examples were given

such as community innovation around geospatial data, and mashups.

Accessibility

There were some insightful comments about how any strategies for Open Government must be accessible to everyone to be truly open (Roger Clarke). The basic argument was made that the human factors must be carefully considered because faster connectivity by itself won't make people "well connected" and as such doesn't ensure the opportunity for community engagement in public processes. Andrew Boyd left a comment on the blog suggested that true accessibility should be adhered to, in making Government websites usable by anyone. Andrew also suggested usability should be research driven, and that online collaboration mechanisms should ensure no voice goes unheard, and that people are consulted about and then empowered through the tools.

People responded very well to this talk both in the room and online, and although it wasn't on the topic of high speed bandwidth, people felt that this topic was very important to ensure systems created and public engagement processes are relevant to actual people, particularly given the enormous diversity of the Australian population, including generational, education, disabilities and digital literacy, just to name a few.

Intellectual Property

Privacy & filtering

David Vaile gave a great pre-recorded speech on the issues around privacy and filtering. He mentioned the need to have open discussions in this area, particularly to identify and deal with risks early on.

He said there is so little experience with new technologies in the broader community that the concern is really understanding what sort of problems exist, and the risks to normal people. In the area of internet filtering, it is important to go back and understand what the original motivation was.

Some of it was about protecting children, some of it is around revulsion of some of the content available online, and some of it is simply fear about where everything is heading. "The problem with the filtering issue is that it is a technological solution to a social problem, and the social problem is out of control."

There are also some technology concerns, such as the creation of tools for deep packet inspection will create new tools that will be quite dangerous from a privacy point of view.

There is a question of the relationship of the technology providers and the traffic that is used. On a bus the bus driver is not responsible for what a passenger is carrying or who they are which itself would create enormous inefficiencies in travel. Whereas we are putting a similar responsibility on the ISPs, and this needs to be carefully looked at.

He talks about how we need to ensure that in the process of trying to deal with these new challenges and opportunities that we don't put aside some of the core and tested approaches that have been used in the past, such as the bus example.

DRM & DMCA

There were some concerns that DRM technologies and DMCA-style legislation "overlay obfuscation for Australian innovators and for accessibility" comments on the blog (Janet Hawtin).

Miscellaneous suggestions

Below are some other miscellaneous suggestions made:

- Kevin Cox suggested a way to help fund infrastructure development - to loan money at zero interest to a company to build infrastructure, in which the citizens of Australia could be shareholders. This idea has not been further discussed.
- Marghanita da Cruz suggested on the blog that the Government "learn from the Cable TV mistake".

Supporting emergent opportunities: 'Real Broadband' should be about a decent connection to the internet in terms of more than just speed and performance. Ideally we would be rolling out infrastructure that delivers as close as practical to a basic TCP/IP connection to the internet that does not interfere with the delivery of a packet of data from one computer to another. Minimal interference (or filtering) of TCP/IP packets is what allows new and exciting opportunities to emerge and flourish. At the moment people who have restrictive (filtered) internet access at work find they can be more productive via their home internet connections (for things such as social networking). Imagine the opportunity cost of living in a country where you need to go (or at least hack access to services) overseas to gain the benefits of emerging online tools and practices.

Recommendations

Industry Review

An inclusive, public process for early identification of barriers and blockages to high-speed bandwidth innovation, such as anti-competitive industry practices, or inaccessible public data, followed by action to remove these barriers.

Technical review

An analysis involving peer-review to prepare a public report of technical solutions that should be considered for NBN implementation, and for online public engagement of government with the public.

Open standards

The urgent and mandatory implementation of open standards (formats and protocols) to ensure future interoperability on the NBN initiatives.

Societal accessibility

Analyse and report on how to ensure society-wide accessibility in government online

engagement.

Global review

Immediate collation, analysis and publication of Government 2.0 initiatives happening around the globe to inform Australia decision makers, and to get a better understanding of how competitive Australia is in this area.

Smart city planning

Ensure infrastructure planning proceeds according to digital economy best practices (digital enablement and futureproofing). This could perhaps be extended to any Government project having to meet some basic requirements in ensuring an informed ICT approach for digital enablement (including project metadata ie: geo-coding).

Public Sphere on "Open Government"

It became quite clear that most participants had an interest in Open Government generally, so we will be announcing a second Public Sphere on the topic of Open Government to further explore this area.

Event Briefing

The first Public Sphere topic was open for public comment and contributions 1.5 weeks prior to the workshop, and then for another 1.5 weeks following the workshop to allow any further comments, links or additional information on the topic to be included in the briefing paper. Feedback during the actual workshop was over Twitter, and was also Liveblogged by one of the attendees. There were also 6 contributors to this Briefing Paper through the public Wiki. All up, this Public Sphere topic drew approximately 130 participants, which for a first event at short notice, we were quite happy with.

Even though this is the first Public Sphere event, a Google search of "public sphere" now sees the web address for this event on the first page of Google results.

Schedule

Pre-recorded sessions marked with an *

- 0830 - Coffee at the Purple Pickle next door to venue
- 0900 - Introduction and comments - Senator Lundy
- 0910 - The 'unexplored country' we will be entering with high speed broadband - Craig Thomler. [Presentation slides](#).
- 0920 - Green ICT - Tom Worthington. [Notes](#) and [Presentation slides](#)
- 0930 - Building a Smarter Planet - what is happening in the digital world to build a digital economy and the imperative that we harness technology to position Australia for the challenges it is facing - Judy Anderson (IBM). [Presentation slides](#) (20MB)
- 0940 - Opportunities for online collaboration over long distances with high speed broadband * - James Purser. [Youtube](#) and [presentation slides](#).
- 1000 - Public empowerment through public engagement with government at all levels - Stephen Collins. [Presentation Paper](#).
- 1010 - Citizen engagement and community participation online: The Canadian experience - Michael De Percy. [Presentation slides](#).
- 1020 - Government service delivery in the new contexts of (a) broadband, (b) highly diverse access devices, (c) highly diverse patterns of use, and (d) highly diverse human needs - Roger Clarke. [Presentation paper](#).
- 1030 - Short coffee break
- 1040 - Rural and regional accessibility in regard to accessing agricultural and environmental information for those working on research and on-ground change - Nerida Hart. Links for [Regional Knowledge Resource Kit](#), [NRM Navigator](#) & [Knowledge for Regional Natural Resource Management](#)
- 1050 - Human factors in broadband telehealth - Duncan Stevenson. [Supporting documentation](#).
- 1100 - Online video publishing possibilities and technology needs - Dr Silvia Pfeiffer. [Blog post](#)

- 1110 - Privacy and filtering * - David Vaile. [Presentation video](#) and on [Youtube](#).
- 1120 - The successful rollout of FTTH in an Australian regional town and how it expands towns with populations of a few hundred, to hundreds of thousands. Also the economic modelling required - Adrian Blake. [Presentation slides](#)
- 1130 - High Bandwidth - getting things done: particularly in respect to dealing with complex real world problems, emergency management and dealing with skills shortages. This is relevant to both the commercial and community sectors - James Dellow. [Presentation slides](#).
- 1140 - Brief presentation on perspectives put forward on the blog for comment - Pia Waugh
- 1155 - Thanks and close of event

The video of the event was streamed online, however unfortunately the recording failed. We shall fix this for the next Public Sphere event, however Craig Thomler - one of the attendees - did an [extensive live blog](#) during the event that covered a lot of the content. In the [comments linked](#) are many other blogs and other perspectives related to the event and the topic. Thank you everyone for your contributions.

Participation

Participation - direct

Event Statistics:

- 22 Public Sphere blog post commenters (44 comments)
- 30 Attendees including 13 speakers) to workshop
- 71 people Tweeted on the event during the workshop (about 10 of which were in the room) resulting in almost 800 Tweets
- #publicsphere continues to get occasional Twitter mentions, however we anticipate the tag be largely used during workshops which draw ideas together

Liveblog coverage of the day:

- Craig Thomler - <http://egovau.blogspot.com/2009/05/liveblog-of-publicsphere-1-high.html>
- George Bray (Technical support for the day) "Wrap up of the first Public Sphere seminar hosted by Senator Kate Lundy" - <http://dld.anu.edu.au/public-sphere>

Participation - indirect

Media coverage to date:

- Technology & Business (Dahna [McConnachie](#)) "Senator launches online project to open Government" - <http://www.technologyandbusiness.com.au/broadband-business/News/Senator-launches-online-project-to-open-Government.aspx>
- PS NEws "Online feedback plugs into policy " - http://www.psnews.com.au/Page_psn1686.html

Blog coverage of the event to date (in no particular order):

- Michael De Percy "Wowers beware: Public Sphere 2.0 is here" - <http://www.abc.net.au/unleashed/stories/s2566119.htm>
- Tom Worthington "Public Sphere #1 Worked" - <http://www.tomw.net.au/blog/2009/05/public-sphere-1-worked.html>
- Keith Lyons "Public Sphere Discussions, Canberra" (and comments on impact of fast networks on sports industry) - <http://keithlyons.wordpress.com/2009/05/06/090507-public-sphere-discussions-canberra/>
- Dr Silvia Pfeiffer "Video as an enabler for broadband applications" - <http://blog.gingertech.net/2009/05/13/video-as-an-enabler-for-broadband-applications/>
- Stephen Collins "Inform. Engage. Empower. Enact." - <http://www.acidlabs.org/2009/05/06/inform-engage-empower-enact/>
- Steve Jenkins "Aus High Speed Broadband: Barriers and Challenges" - <http://stevej-on-it.blogspot.com/2009/05/aus-high-speed-broadband-barriers-and.html>
- Marghanita da Cruz "Productivity Commission - Broadcasting - Public inquiry" - <http://www.ramin.com.au/marg/pccsub.html>
- James Purser "Public Sphere - From a Distance" - http://collaborynth.com.au/blog/Public_Sphere_-_From_A_Distance
- Steve Jenkins "High-Speed Broadband: Excess Costs and Opportunity Losses" - <http://stevej-on-it.blogspot.com/2009/04/high-speed-broadband-excess-costs-and.html>
- Michael De Percy "Kate Lundy's Public Sphere" - <http://www.typeboard.com/2009/05/kate-lundys-public-sphere/>
- Darrell Burkley (CASE) "Note on Public Sphere event held today @ ANU" - <http://www.case.org.au/blogs/case/2009/05/note-on-public-sphere-event-held-today-anu/>
- The Municipal Reference Radar (US) - <http://muniref.blogspot.com/2009/05/volutourism-public-sphere-project-green.html>
- Local Government Web Network (Local Government in NSW) "Welcome to the Public Sphere" - <http://lgwebnetwork.org/2009/05/13/welcome-to-the-public-sphere/>
- Kerry Webb "The future of Democracy?" - <http://www.alia.org.au/members-only/webbsblog/?p=131>
- Tom Koltai "Australian Government Protects its Toilet Database against Terrorist P2P Attack" - <http://www.perceptric.com/blog/archives/2009/5/7/4177548.html>
- Tom Koltai "Democracy Finally Arrives in Australian Politics" - <http://www.perceptric.com/blog/archives/2009/5/7/4177553.html>

Mailing lists: Not all mailing lists have public archives, those available we know of are linked below:

- Links list - <http://mailman.anu.edu.au/pipermail/link/2009-May/083318.html>
- Oz-teachers list - <http://lists.rite.ed.qut.edu.au/pipermail/oz-teachers/2009-May/017529.html>

We didn't broadly advertise the event due to the short notice, but sent emails to the local Links list (TODO), to the Gov20 list (TODO), and of course on the Senator's blog. Below are the announcements made by other people about the event:

- [WotNews](http://wotnews.com.au/like/kate_lundys_public_sphere/3365011/) - http://wotnews.com.au/like/kate_lundys_public_sphere/3365011/
- Michael De Percy - <http://madepercy.blogspot.com/2009/05/public-sphere-kate-lundys-public-sphere.html>
- Craig Thomler - <http://egovau.blogspot.com/2009/05/high-speed-broadband-for-australia.html>
- Craig Thomler - <http://egovau.blogspot.com/2009/04/senator-kate-lundy-launches-public.html>
- Craig Thomler - <http://chieftech.blogspot.com/2009/04/conferences-in-may-and-june.html>
- Pia Waugh - <http://pipka.org/blog/2009/05/01/high-speed-broadband-in-australia-what-do-you-think/>
- Convergence Emergence - <http://conem.wordpress.com/2009/05/05/public-sphere-in-australia/>
- Tom Koltai - http://www.perceptric.com/blog/_archives/2009/5/6/4176681.html
- James Purser - http://collaborynth.com.au/blog/Public_Sphere_-_High_Bandwidth_for_Australia

Lessons learned

- The streaming video worked quite nicely for most remote participants, but a few people had some issues. Most were figured out pretty quickly (some issues with browser and player compatibility). Because the stream was quite large a few people hit their monthly caps during the event which then slowed them down significantly. Also, the capture of the video failed so there was no available recording after the event to put onto the website. These issues will be sorted (or in the case of the large stream, at least a bit better) by the next event. There was a technical wrap up of the day here - <http://dld.anu.edu.au/public-sphere>
- We didn't get any feedback that was offline, and citizens who couldn't attend or use twitter couldn't participate in the event. We'll be restructuring the "topic" a little to make it easier for people to submit input (email, letters, blog comments, etc) and the event will be just a part of the input process, not the main component as the process as it is obviously only accessible by a proportion of the community.
- We will be ensuring we copy the Twitter feed directly after the event, as the Twitter search tools were unreliable and often didn't return all the #publicsphere Tweets (particularly a week later). For this report we had to use <https://www.tweetscan.com/index.php?s=+publicsphere>

- We will have at least one or two more people helping on the day to keep things running smoothly.
- We are looking at modifying the schedule to have more small regular breaks (perhaps every hour) to build buffer time and allow people to catch up on topics.
- We are adding a Facebook page for events and will also be ensuring events are accessible from the new website.
- A new website theme has been deployed to make Public Sphere topics easier to find and follow.
- Future Public Spheres will have more notice, and will involve more people.
- We will ensure a rolling twitter feed of #publicsphere is projected on the wall with presentations so people in the room not on Twitter can watch and engage, as well as to provide speakers a better idea of the simultaneous conversation happening.

Unintended consequences

Another online discussion Senator Lundy started and engaged in around real and fake Twitter accounts has resulted in a new Open Australia initiative to list real and fake Australian politician account at all levels of Government:

- <http://ozpollietweeters.pbworks.com/FrontPage>