



16 July 2009

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Select Committee on the National Broadband Network  
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Canberra ACT 2600

By email to [broadband.sen@aph.gov.au](mailto:broadband.sen@aph.gov.au)

Dear Alison

Thank you for your letter on behalf of the Senate Select Committee on the National Broadband Network (NBN) inviting Google to make a submission in light of developments with the NBN over the last few months. Our understanding is that the Committee's Role is to inquire into and report on the Government's decision to establish a company to build and operate a National Broadband Network (NBN) and the implications of the NBN for consumers and taxpayers.

Our first formal commentary on the NBN came in mid 2008 when we provided a broad submission to the Government on its NBN proposals.

In this letter we offer a vision for broadband in Australia, outline some views on the progress to date of the national broadband network, and provide some background information about Google and our presence in Australia.

### ***Google's Vision for Broadband in Australia***

Google imagines an Australia in which broadband Internet is universally accessible, at world class speeds and at affordable prices. Faster broadband, in more places, at prices that enable the services to be fully used as part of Australians' daily lives, will ensure that Australians can fully engage in the global digital economy and Australian businesses can more effectively compete on the world stage.

In the global economy of the 21<sup>st</sup> century, no infrastructure is more crucial than advanced communications networks. Indeed, the United Nations has recognised broadband as essential infrastructure: as a utility that is just as necessary as water and electricity.<sup>1</sup>

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<sup>1</sup> *United Nations Conference on Trade and Development Information Economy Report UNCTAD/SDTE/ECB/2006/1, November 2006*



The NBN will enable novel and transformative uses of the Internet, along with other sorts of network-based innovations and data transport services. Numerous countries have demonstrated that national broadband strategies and public sector leadership can be crucial to deployment<sup>2</sup>, and Australia has wisely followed this course.

Google submits that there are additional benefits to be obtained by ensuring that Australians have access to faster and more affordable broadband services. These benefits flow from the positive value that the Internet can bring in and of itself, such as:

- **Encouraging free speech and citizen participation.** Free speech is no longer just a right granted by law, but one imbued by technology. Publishing used to be constrained by physical limitations. Today, most publishing is done by users for users, one-to-one or one-to-many (Twitter, Facebook, Wikipedia, and YouTube). Relevant examples include the 2007 Google Australian election initiative<sup>3</sup>, Question Time on the Premier of Victoria's YouTube channel<sup>4</sup> or citizen participation via the Davos World Economic Forum channel on YouTube<sup>5</sup>. The NBN will further promote this trend of participation and transparency with high definition video conferencing of Parliament question time and company AGMs.
- **Turbocharging businesses.** It used to be that every growing business would at some point have to make a big investment in computers and software for accounting systems, customer management systems, email servers, phone and video conferencing systems. Today, all of those services are available via the network cloud, and are paid for only as used. Small businesses can scale up without making huge capital investments. The combination of cloud computing and high speed broadband levels the playing field so that the small business has access to the same systems that large businesses do.
- **Spurring innovation.** Today, the best technology starts with consumers, where a Darwinian market drives innovation that far surpasses traditional enterprise tools, and migrates to the workplace only after thriving with consumers (e.g. Gmail, Google Video). With high speed broadband access, consumers will demand even more innovative products and services in the home which will filter into the workplace.
- **Spurring creativity,** as seen already through user-generated collaborations on sites such as YouTube, Facebook and MySpace. The NBN will help connect and inspire creative minds, for instance enabling live jamming sessions for musicians and artists across the country.
- **Improving usability.** Google's own research has shown that users can detect very small changes in speed and that Google would lose traffic by being just a fraction of a second slower. High speed broadband for all will improve everyone's experience and increase usage of the web.

<sup>2</sup> EDUCAUSE study:<http://net.educause.edu/ir/library/pdf/EPO0801.pdf>; see also OECD main findings 2008: <http://www.oecd.org/dataoecd/32/58/40629032.pdf>

<sup>3</sup> [http://www.google.com.au/election2007/#utm\\_campaign=en&utm\\_source=en-ha-apac-au-google&utm\\_medium=ha&utm\\_term=australia%20election](http://www.google.com.au/election2007/#utm_campaign=en&utm_source=en-ha-apac-au-google&utm_medium=ha&utm_term=australia%20election)

<sup>4</sup> <http://www.youtube.com/user/premierofvictoria>

<sup>5</sup> <http://www.youtube.com/davos?gl=IE&hl=en-GB>



- **Accessing the world's information.** Oil fueled the Industrial Revolution, but data will fuel the next generation of growth. There is currently 20 hours of video content uploaded to YouTube every minute. But much of the world's information is currently inaccessible, being offline or in another language. Google is further facilitating this access by bringing offline content online (e.g. Digitisation of Fairfax newspapers) and innovating around machine language translation.

### **Creating the Best Regulatory Environment for the NBN**

Our view is that the NBN represents an historic opportunity to significantly increase broadband use and to develop a forward-looking regulatory environment to enable Australian consumers to fully participate in all of the benefits of the digital economy.

In terms of designing the regulatory environment, there are several key points that should be considered to achieve the vision for broadband in Australia:

- An open Internet is good for Australian consumers and businesses. To unlock the full potential of the NBN and the Internet access it will deliver, it is crucial to implement policies that maintain the Internet's fundamentally open, neutral, and non-discriminatory nature.
- As important as the goal of universal access to fast broadband is, it will also be the affordability of broadband services that will ensure that Australians will be able to fully embrace the significant benefits of participation in the digital economy.
- In designing the regulatory environment for the NBN, consideration should be given to promoting a regulatory environment that protects user choice, competition and innovation on the Internet.
- Google submits that it is essential that the NBN operator(s) offer services on a wholesale basis to independent providers on fair and transparent terms

### **NBN Developments in 2009**

Since making our submission to government last year, the NBN project has evolved significantly. In April the Government announced the establishment of a new company to build and operate an NBN to:

- Connect 90 percent of Australian homes, schools and workplaces with broadband services with speeds up to 100 megabits per second
- Connect all other premises in Australia with next generation wireless and satellite technologies



The new company, jointly owned by the Government and the private sector, is to invest up to \$43 billion over 8 years to build the national broadband network.

The NBN is also to provide fibre optic transmission links connecting cities and major centres and to operate on a wholesale-only basis.

To turn its vision into action the Government has kicked off a number of streams of activity

1. an implementation study to determine the operating arrangements and network design
2. legislative changes that will govern the national broadband network company and facilitate the rollout of fibre networks
3. a consultative process on necessary changes to the existing telecommunications regulatory regime.

Following the Government's announcement we welcomed the initiative as an enabler of change for Australian businesses and users. We highlighted that the Government's vision of an open, extremely fast, fibre-to-the-premise network, operated by an independent wholesaler, was very positive.

We also welcome the commitment to roll out fibre optic infrastructure between major urban centres.

Also of relevance is the issuing in April, by the Minister for Broadband, Communications and the Digital Economy, of a discussion paper on the existing regulatory framework for telecomms and broadband. The paper considers options for the development of the regulatory framework to support competition in the communications sector, provide for better consumer protection, and the regulatory structures for the NBN (governance, ownership etc.) and the associated roll-out of fibre. Our view is that getting the regulatory framework for the telecomms sector, and specifically for the NBN, right is as important as the scale of investment in new infrastructure. Our high-level views on the regulatory environment are outlined earlier in this document. We will follow the review of the regulatory framework closely as it moves forward.

In parallel the Government has initiated new legislation into the Senate which seeks to provide for one element of the NBN, i.e. the provision of information by telecommunications carriers and other utilities to the Commonwealth for purposes related to the planning and roll-out of the National Broadband Network. This draft law is made up of a series of detailed amendments to the Telecommunications Act 1997, which together seem to be a reasonable set of technical enabling measures.

### ***About Google***

Google is a leading provider of Web-enabled software applications, content, and services. Google initially became familiar to most Internet users as the provider of the Google search engine, which enables hundreds of millions of users around the world to find information quickly at the click of a mouse.



Google now provides various well known specialist search and information services, including Google News, Google Earth and Google Maps. More recently Google acquired the well-known YouTube service. YouTube is a platform for people to watch and share original videos through a Web experience.

Australia is a vital country for Google and makes a substantial contribution to Google's worldwide operations. We're thrilled that over 9m Australians choose our search engine and over 3.5m watch videos on YouTube each month. Millions more use our other products. We're focused on working to continually improve our services in Australia.

Google Maps was invented in Australia and has become an enormously successful product worldwide, revolutionising online mapping, access to geographic information, and user generated content. The Google Australia engineering centre, which launched in May 2005, contributes to the development of Google products and services in Australia and around the world.

Google's self-defined mission statement is straightforward, if not daunting: to organise all of the world's information and to make it universally accessible and useful.

There are three aspects of Google's mission. In many ways, fulfilling two aspects of this far-reaching corporate goal (organising the world's information, and ensuring it is easy to use) are largely within the purview of the employees of Google – in Australia and abroad, along with hundreds of thousands of small business partners, vendors, and of course our customers. The greater challenge is the central component of our mission: universal accessibility. Like other Internet-based companies, Google relies on the communications infrastructure provided by underlying carriers in order to reach our ultimate end users.

As such, Google has a strong interest in the progress of the NBN – both to advance its own mission and also to ensure that consumers have the best possible access to fast and affordable broadband services.

We intend to follow the progress of the NBN closely and look forward to tracking the Committee's consideration of this important policy issue.

Yours sincerely

Iarla Flynn  
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