Domestic mobile roaming service declaration inquiry

SUBMISSION

Over many years, I have experienced growing difficulties with the digital phone network. Even living in an urban centre on the northern beaches of Sydney, there are known 'dead zones' where phones and related electronic devices will not work. This is frustrating personally and, also annoying professionally when you are trying to conduct a business.

While establishing a domestic roaming service will improve coverage, the number of communication towers you would have to construct (to have a meaningful impact) would be economically prohibitive. Alternatively, if you staggered the rollout of towers over five to ten years, by the time the project was completed, the technology would likely be redundant.

It has always amazed me how regulators and governments look to complex solutions, when simpler ones potentially exist. To my mind, launching high atmosphere balloons, as Google is doing with its Loon Project, would potentially provide a solution that is cheaper and quicker, with fewer administrative or planning complexities.

I attach a recent submission I wrote on the matter, for your information.

Yours faithfully,

Adam Johnston

November 1, 2016



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To: The Hon. Bronwyn Bishop MP, Chair, House Standing Committee on

Communication and the Arts

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From: Adam Johnston, Proprietor, ADJ Consultancy Services

Date: February 15, 2016

Re: Inquiry into broadcasting, online content and live production to rural

and regional Australia

Terms of Reference

The Committee, under its power to inquire into the annual reports of government agencies, will inquire into the importance of public and commercial broadcasting, online content and live production to rural and regional Australia, including the arts, news and other services.

The inquiry was initiated from the following reports:

- Australian Broadcasting Corporation Annual Report 2015
- Special Broadcasting Service Corporation Annual Report 2015
- Australia Council for the Arts Annual Report 2014-15
- Australian Communications and Media Authority Annual Report 2014-15

Dear Mrs. Bishop

You might be surprised that a Sydney suburban one man consultancy is writing to this Committee about broadcasting in regional and rural Australia. However, while asserting that suburbia is a region of Australia, my more substantive point is that you don't have to live in rural Australia to have trouble accessing on-line content.



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This can be frustrating on a number of levels. Firstly, as a consultant, paid work is precious and, there can be considerable hiatus's between clients. Therefore, when you receive a contract, you want to produce not only professional work, but reports which your client can access easily, in a timely manner.

Document preparation and research time can be unnecessarily elongated by slow downloads and "freezing" computers. Clients should not and need not be charged for these things, but if I have experienced such frustrations on my very small scale, I'm sure many other larger businesses have faced even greater problems.

And then, when the assignment is finished, to send multiple e-mails due to document size or number of files are not entirely professional solutions. This leaves your client to sort through a mass of emails, unless both parties have compatible document sharing technology and/or, are prepared to accept their IP being put on a "cloud".

The business impact is the serious end of an increasingly stretched internet communications system. Lesser frustrations can be no reception zones on digital mobiles (unless you are dealing with a medical or similar emergency, which could be extremely serious) and digital televisions which pixelate (or lose all signal) at the first hint of poor weather. Add to this those occasions when these same devices seem to take unilateral decisions to "update" their software; an action which can be very inconvenient and potentially costly for users.

In many respects, this all makes me yearn for the old analog network, which seemed to work with much greater reliability. I note with interest that under Section 10(q) of the *Australian Communications and Media Authority Act 2005*, ACMA is to "report to, and advise, the Minister in relation to the broadcasting industry, internet industry and datacasting industry".¹ If they advised the then then Minister to turn off the analog network, this does not inspire me with confidence. Equally, while many spoke of the National Broadband Network as

¹ See the legislation on Austlii at http://www.austlii.edu.au/au/legis/cth/consol act/acamaa2005453/s10.html as at 13 February 2016



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the resolution to many internet and datacasting problems, the northern beaches of Sydney are particularly poorly served in this respect. For example, on July 3rd 2015 *The Manly Daily* reported:

Lightning-fast internet is on its way to seven northern beaches suburbs, which have just been added to the National Broadband schedule. But not everyone living in Allambie Heights, Brookvale, Curl Curl, North Manly and Queenscliff will benefit. Disappointingly, only 2100-17 per cent of homes in the region – will get the upgrade, which will start at the end of $2016.^2$

This does not appear to have changed.³ This is why my argument is that access issues are not limited to rural areas. Nonetheless, I recognise that launching satellites and/or laying down thousands of kilometres of cabling are extremely costly ventures. It surprises me then that the Australian Government has not sought to take advantage of potentially lower cost solutions.

For example, the Google Corporation has launched Project Loon. The MIT Technology Review states:

Google has launched hundreds of these balloons into the sky, lofted by helium. At this moment, a couple of dozen float over the Southern Hemisphere at an altitude of around 20 kilometers, in the rarely visited stratosphere—nearly twice the height of commercial airplanes.

Each balloon supports a boxy gondola stuffed with solar-powered electronics. They make a radio link to a telecommunications network on the ground and beam down high-speed cellular Internet coverage to smartphones and other devices. It's known as Project Loon, a name chosen for its association with both flight and insanity.

² Steven Deare, *Fast net to come slowly,* The Manly Daily, 3 July 2015, p.1, http://www.pressreader.com/australia/manly-daily/20150703/281642483831477/TextView as at 14 February 2016

³ See e.g.: http://www.iinet.net.au/internet/broadband/nbn/coverage/ as at 14 February 2016. iiNet advises: "The nbn™ network rollout has not started in your area. Keep checking the website for more information."

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Google says these balloons can deliver widespread economic and social benefits by bringing Internet access to the 60 percent of the world's people who don't have it. Many of those 4.3 billion people live in rural places where telecommunications companies haven't found it worthwhile to build cell towers or other infrastructure. ⁴

The aim of the project is to bring internet access to less developed parts of the world. Test flights were conducted over New Zealand, while MSN has also reported launches planned over Indonesia. Loon has not been without its balloon crashes and critics. However, it is not my point to necessarily advance or dismiss Loon – personally, I do not have sufficient technical knowledge to make a valid technical appraisal. Nor do I in any way speak for Google or any other interest; my views are my own and I speak for what I perceive as my business and personal interest.

However, as a businessman and a solicitor trained in the weighting of evidence and contesting hypothetical outcomes, I see one thing clearly. The Australian taxpayer has already invested billions into NBN and digital broadcasting. The results are far less than one might have expected for all the time, energy, capital and public money invested. In the light, technologies like Loon may well provide a viable alternative. The Committee should recommend to the Government that a Loon-style technology be examined, to improve access to

⁴ MIT Technology Review, Project Loon - Billions of people could get online for the first time thanks to helium balloons that Google will soon send over many places cell towers don't reach, https://www.technologyreview.com/s/534986/project-loon/ as at 14 February 2016

⁵ See e.g.: Duncan Geere, Google blimps will carry wireless signal across Africa, Technology, 26 May 13, http://www.wired.co.uk/news/archive/2013-05/26/google-blimps as at 15 February 2016.

⁶ See Project Loon blog https://googleblog.blogspot.com.au/2013/06/introducing-project-loon.html; also see https://googleblog.blogspot.com.au/2013/06/introducing-project-loon.html; also see https://googleblog.blogspot.com.au/2013/06/introducing-project-loon.html; also see

⁷ Jessica Guynn, Google X's Project Loon to parachute into Indonesia, USA Today 29/10/2015, http://www.msn.com/en-au/money/technology/google-xs-project-loon-to-parachute-into-indonesia/ar-BBmyEny as at 15 February 2016

⁸ Amir Mizroch, Google internet balloon crashes in South Africa, The Australian, November 21, 2014 8:18AM, http://www.theaustralian.com.au/business/wall-street-journal/google-internet-balloon-crashes-in-south-africa/news-story/954e58ad21d57bf82b3cf73f86a3cb7a as at 15 February 2016.

⁹ See generally Steven Levy, Google's Balloon Internet Experiment, One Year Later, Business - Date of Publication: 06.16.14. - Time of Publication: 11:00 am. http://www.wired.com/2014/06/google-balloons-year-later/; Another useful overview, outlining pros and cons can be found at "A handy Guide to Loon" at http://readwrite.com/2013/06/19/a-handy-guide-to-google-project-loon#! As at 15 February 2016.



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communications (and thus, trade, arts and the like) in not only rural Australia, but many urban areas as well.

Yours faithfully,

Adam Johnston