

A White Paper

## Why the Australian “Fiber Mae” Broadband Model Does Not Work for the U.S.

*An Analysis of Why the Australian Broadband Policy Model  
Is Not An Applicable, Practical, or Sound Policy Option  
For the FCC’s National Broadband Strategy Effort*

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**Abstract.** As the FCC lays the groundwork for its submission of a National Broadband Strategy to Congress next February, some suggest the U.S. follow the lead of Australia’s new broadband policy model. While it may have superficial and nostalgic appeal to some, upon close scrutiny and analysis it is not an applicable, practical or sound broadband policy option for the United States. The Australian “Fiber Mae” broadband policy model is:

- *Not applicable* to the U.S. because the ownership and competitive baselines in Australia and the U.S. are not analogous;
- *Not practical* for the U.S. because it is a hugely expensive proposal in an exceedingly tight budget/financial environment that would generate very little incremental additional benefit over the current competitive trajectory; and
- *Not sound* policy for the U.S. because it pursues the wrong policy emphasis and structure, which could have the perverse result of the U.S. falling behind in broadband leadership -- the exact opposite of the intended result.

In short, we can’t continue to make progress in broadband by stopping for a few years to re-decide what direction the industry should be going in, or by turning around and going in a whole new direction. The wise and best national broadband strategy will build upon the existing broadband foundation and direction of success – facilities-based broadband competition.

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## I. Introduction

As the FCC lays the groundwork for its submission of a National Broadband Strategy to Congress next February, some suggest the U.S. follow the lead of Australia's new broadband policy model ([http://www.minister.dbcde.gov.au/media/media\\_releases/2009/022](http://www.minister.dbcde.gov.au/media/media_releases/2009/022)). While it may have superficial and nostalgic appeal to some, upon close scrutiny and analysis it is not an applicable, practical or sound broadband policy option for the United States for a variety of reasons. The Australian "Fiber Mae" broadband policy model is:

- *Not applicable* to the U.S. because the ownership and competitive baselines in Australia and the U.S. are not analogous;
- *Not practical* for the U.S. because it is a hugely expensive proposal in an exceedingly tight budget/financial environment that would generate very little incremental additional benefit over the current competitive trajectory; and
- *Not sound* policy for the U.S. because it pursues the wrong policy emphasis and structure, which could have the perverse result of the U.S. falling behind in broadband leadership -- the exact opposite of the intended result.

By way of background, the Australian Government announced last month that it would establish "a new company to build and operate a new super-fast National Broadband Network." The proposal would deploy fiber to the home to 90% of users with 100 Mbs, and deploy 12 Mbs wireless technology to the remaining 10% of the country, at an estimated total cost of ~\$31b or ~\$4,100 per home passed. This government sponsored enterprise would be majority-owned by the Australian Government. It would create "Australia's first national wholesale only, open access broadband network."

I dubbed the Australian approach the "Fiber Mae" model because the creation of a new Government Sponsored Enterprise to deploy Government-subsidized fiber infrastructure to all Americans would be structurally similar to other Government Sponsored Enterprises (GSEs): Fannie Mae, Freddie Mac and Sallie Mae.

## II. Not Applicable – Non-Analogous Ownership or Competitive Baselines

*Different public/private ownership histories:* In the U.S., the phone companies have always been privately owned by shareholders and the 1996 Telecom Act changed national communications policy from regulation of a monopoly to promotion of competition. In Australia, the incumbent phone company, Telstra, was Government-owned until 2006 when it was privatized. As for cable, American cable companies have always been privately owned, and built their networks with at-risk private capital. In Australia, the main cable company, Optus, was originally owned by the Australian Government, was privatized, and since 2001 has been foreign-owned by Singapore Telecommunications.

*Different levels of competition success:* Unlike the U.S., Australia does not have *national* wire line broadband competition. In the U.S., cable passes ~95% of American households. In Australia, the cable company Optus, [www.optus.au](http://www.optus.au) passes only ~29% of Australian households.

In the U.S., *regional* cable companies are the leading broadband provider in their markets, which is in contrast to Australia, where the *national* incumbent phone company, Telstra, is both the dominant wholesale broadband reseller and retail broadband provider.

*Facilities vs. Resale Competition:* The U.S. has encouraged and successfully developed widespread facilities-based broadband investment and competition; consequently, the U.S. private sector has responded with over \$200b in facilities-based broadband investment over the last several years. On the other hand, Australia started to build two broadband hybrid-fiber-coax networks for cable broadcast services, one by Telstra, the other by Optus, but regulations ultimately stymied that original idea for facilities-based competition between networks because regulators required the incumbent, Telstra, to resell broadband service at below-cost prices for unbundled elements.

- For example, the broadband wholesale resale price has been set so low for the incumbent Telstra, that Optus, its cable competitor with facilities in 29% of the country, routinely resells Telstra broadband service rather using its own facilities, because reselling Telstra's plant is cheaper than using its own existing hybrid-fiber-coaxial infrastructure plant.
- As a result, Telstra's largest competitor, Optus, ironically is also Telstra's largest customer, and has little incentive to complete the build out of its facilities to achieve national facilities-based competition.

### **III. Not Practical – Huge Cost for Little Incremental Benefit**

*Huge cost in a tight budget/high debt environment:* Given that Australia has ~22m people and ~7.5m households, and the U.S. has ~305m people and ~105m households, the ~\$31b cost of the Australian plan would be the equivalent of ~\$430b in the U.S. Recent experience proved that there is not much support for such a big cost to taxpayers when the private sector is already investing heavily and successfully in broadband for over 90% of the country. More specifically, when proponents of heavy public investment in broadband recommended a very large amount to Congress in the run-up to the \$787b economic stimulus package, the large amounts for national public investment in broadband were radically scaled back to focus \$7.2B on just un-served and under-served areas of the country where geographic and density circumstances were not yielding sufficient broadband deployment. This very recent test case proved there was no interest in a multi-hundred billion public investment in broadband for the ~90% of the country where private broadband investment/deployment has been and continues to be robust.

Moreover, the Administration and Congress have a long list of higher budget priorities than public investment in a national broadband network: i.e. health care reform, renewable energy/climate change programs, education, home foreclosures, financial system stabilization, unemployment assistance, the wars in Iraq and Afghanistan, etc. Furthermore, the Administration just submitted ~\$17b in new additional budget cuts to next year's budget.

In reality the total cost would be much greater than \$430b because real world experience indicates that deployment alone can not ensure widespread adoption of broadband, even if it is widely available. Tens of billions dollars of additional demand-side spending would be needed to

provide education, equipment and other subsidies to ensure that this new Government-built broadband plant would be appropriately utilized.

*Extremely expensive for little incremental benefit:* Why spend a roughly a half a trillion dollars to build and operate what would be a tenth national broadband network in the United States when nine private different alternatives already exist in the vast majority of the country?

1. Incumbent telco's copper/fiber broadband infrastructure;
2. Incumbent cableco's HFC broadband infrastructure;
3. Verizon Wireless' national 3G wireless broadband network;
4. AT&T Wireless' national 3G wireless broadband network;
5. Sprint's national 3G wireless broadband network;
6. T-Mobile's national 3G wireless broadband network;
7. Clearwire's national 4G WiMax broadband network (under construction);
8. HughesNet's largely national satellite broadband network; and
9. WildBlue's largely national satellite broadband network.

By the time this theoretical 100 Mbs broadband network could be built in 4-8 years, would it be any better than what existing private networks could deliver with a multi-year head start and no taxpayer funds?

- Verizon has already deployed fiber-to-the-home plant to 10% of the country that can potentially deliver much more than 100 Mbs, and will deploy to another 5-10% of the country in the next few years.
- CableVision is now offering 100 Mbs broadband service over DOCSIS 3.0 technology.
- Most of the nation's cable plant is currently being upgraded with DOCSIS 3.0 to deliver 100 Mbs in much of the country in a matter of months without any need for public investment.

What is on the government's drawing board in Australia is already being delivered by private sector competition in the U.S. without taxpayer involvement. **The central impracticality of the Australian example is that it has simply been overtaken by events on the ground in the U.S.**

#### **IV. Not Sound Policy – Wrong Emphasis, Wrong Structure**

*Contrary to consumer demand for mobility:* Adopting a fiber-centric public investment approach to broadband assumes consumers and businesses only demand broadband speed when the facts show they demand broadband mobility just as much if not more. Sound policy depends on listening to consumers' genuine demand, not assuming it away.

Consumers' actions in the competitive wireless market provide a wealth of data that proves consumers demand mobility from broadband as much as they demand speed. The latest survey from the CDC on cell-phone use estimates 20% of households are now cell-phone only. FCC data have long shown that there are more wireless phones in use than wire line phones, and that consumers use more wireless minutes than wire line minutes. Moreover, FCC data also show that wireless broadband is the fastest growing segment of broadband service. Furthermore the latest

OECD wireless data submitted to the FCC show that Americans demand wireless mobility *almost four times more* than Australians. The average monthly minutes of use in the U.S. is 829 minutes versus 216 minutes in Australia.

([http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\\_or\\_pdf=pdf&id\\_document=6520216419](http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6520216419))

*The GSE “Fiber Mae” structure is problematic:* I dubbed the Australian approach the “Fiber Mae” model because the creation of a new Government Sponsored Enterprise to deploy Government-subsidized fiber infrastructure to all Americans would be a similar Government structure to other American Government Sponsored Enterprises: Fannie Mae, Freddie Mac and Sallie Mae. Given that all three of the above-mentioned GSEs are currently in dire financial straits warranting government financial bailouts and/or de facto government conservatorship, the GSE model is not a particularly popular policy model in the United States at this point in time.

Complicating the use of the GSE model for broadband is that one of the explicit goals of the model would be to ensure “sub-prime-like” investments be made to deliver broadband to households that cannot afford to pay for its cost. The appropriate structure for subsidizing service that people cannot afford is direct government grants, not a GSE that is supposed to run more like a business and that generally seeks to recover costs from its users.

## V. Conclusion: Recipe for Falling Far Behind in Broadband

The biggest problem with any radical change in broadband policy -- away from the current facilities-based competition approach -- towards a more government-dictated/funded approach -- is that it is practically a recipe for falling behind the rest of the world in broadband – perversely the exact result the policy change would hope to avoid.

The monster flaws in the thought process behind those that seek to radically change the current market-based broadband policy to a more-government-run broadband policy are three-fold.

- First, any serious discussion of, or attempt by, the Government to reverse 14 years of current communications competition policy **would chill and discourage current private broadband investment**. Rather than continuing to invest and deploy broadband to maintain America’s competitiveness, the Government would be signaling that private investment may no longer be welcome in the broadband sector. It is logical then, that private interest in long term broadband investment would be much reduced because the likelihood of a long term return on that investment would be much less likely.
- Second, any serious attempt to overhaul or reverse current communications policy would take years to accomplish. In a perfect world, assuming there was no conflict or opposition to a radical communications policy overhaul, it would probably take at least three years before a new policy could be implemented.
  - The three years would be: the next year for the FCC to devise a new national broadband strategy, another year for Congress to pass legislation, and another year to implement the new legislation.
  - Most know the perfect world does not exist in Washington.
- Third any substantive overhaul would be extremely complex, contentious, and most likely legally challenged whether Congress passed new legislation or the FCC

proceeded with a new policy in the absence of new authorizing legislation. Fourteen years into the current bipartisan policy to promote competition and deployment of advanced technologies, there have been innumerable government decisions and precedents that industry has relied upon, hundreds of billions of dollars that have been invested, and innumerable innovations that have been made – all based on the current competition policy trajectory.

In short, we can't continue to make progress in broadband by stopping for a few years to re-decide what direction the industry should be going in, or by turning around and going in a whole new direction. The wise and best national broadband strategy will build upon the existing broadband foundation and direction of success – facilities-based broadband competition; it won't tear it down, or start all over from scratch.