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**From:** Mike Kaiser  
**Sent:** Thursday, October 07, 2010 7:25 PM  
**To:** Nuttall, Graham (T. Windsor, MP)  
**Cc:** Rhonda Griffin; Cassandra Scott; Duncan Bremner  
**Subject:** RE: Broadband: top priority for regional development and health

Fantastic. Thanks Graham.

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**From:** Nuttall, Graham (T. Windsor, MP) [<mailto:Graham.Nuttall@aph.gov.au>]  
**Sent:** Tuesday, 5 October, 2010 4:50 PM  
**To:** Mike Kaiser  
**Subject:** FW: Broadband: top priority for regional development and health

Hi Mike

You may not have seen this

Regards

Graham

*Graham Nuttall*  
*Adviser*  
*Tony Windsor MP*  
*Member for New England*

*Tamworth* 02 6761 3080  
*Canberra* 02 6277 4722  
*Mobile*

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**From:** Gordon Gregory   
**Sent:** Tuesday, 5 October 2010 3:06 PM  
**To:** Gordon Gregory  
**Subject:** Broadband: top priority for regional development and health



NATIONAL RURAL  
HEALTH  
ALLIANCE INC.

**Media Release**

5 October 2010

**Broadband: Top priority for regional development and health**

Last night's *Four Corners* program highlighted the importance for country people of having equal access to affordable, high-speed broadband.

Deputy Chair of the National Rural Health Alliance, Kathy Kirkpatrick, said it is important for rural businesses, education, local government, employment opportunities and – not least – health to have high speed broadband available at the same price for all Australians.

"In fact, it is important that broadband reaches out to rural and remote towns and communities first, so that those who stand to benefit the most get the support first," Dr Kirkpatrick said.

"In these places, high speed broadband would provide the opportunities taken for granted by many in urban areas to do business, study, administer local government, reduce the need to travel, and to send and receive vital information. The earliest possible access to new technologies is critical if rural and remote Australia is to develop and prosper, in the interests of all Australians.

"For health services high speed broadband is especially valuable, allowing health consultations to be made in real time and enabling urgent specialist advice to rural and remote areas, often in emergency and other critical situations. This is not possible with dial-up because of the associated unreliability and bandwidth problems.

"Broadband would provide confidence that rural and remote internet communication with real time video conferencing will not drop to snail's pace because the CBD in Sydney, for example, is hurrying to get online work done before close of business; so that the picture doesn't break up when you're trying to get help and advice. This capacity for e-health is fundamental to improved health outcomes in the bush in so many ways – and the opportunities to use the technology and to provide health services in the most efficient way are boundless.

"Broadband is not just about consultations. Technology exists for monitoring a patient or an aged person in their home, yet connections in the bush are not yet reliable or fast enough for that to occur.

"Broadband is also essential to attract and retain health professionals in the bush. Continuing professional development programs for doctors, nurses and other health professionals through interactive internet are becoming increasingly important, but these are not useful if you're in a remote location without reliable internet access. Rural health students, the professionals of the future, say they simply don't want to go to the bush unless they know they can maintain internet contact with their professional and personal support networks, as well as enjoy all the other benefits of the internet available in the city," Dr Kirkpatrick said.

**Contacts**

Dr Kathryn Kirkpatrick - Deputy Chair:

Marshall Wilson - Media:

Gordon Gregory  
Executive Director  
**National Rural Health Alliance**

W [www.ruralhealth.org.au](http://www.ruralhealth.org.au)

[11th National Rural Health Conference](#)  
[Perth, 13-16 March 2011](#)



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**From:** Mike Kaiser  
**Sent:** Tuesday, October 26, 2010 5:05 PM  
**To:** Windsor, Tony (MP); [redacted]  
**Subject:** RE: National Broadband Network

Hi [redacted]

I spoke to [redacted] moments ago. It is clear to me we made a number of mistakes which I acknowledged and apologised to him for:

1. Based on his description of the form he received it was almost certainly the notification our contractors distribute in streets ahead of construction to advise of coming activity. Inside the first release site it makes sense for that form to also include encouragement to consent. It should not have been used outside the footprint where people don't have that option. As well the notification contained reference to a date that had passed! That would have been a mistake even inside the footprint.
2. [redacted] rang our 1800 number and it didn't answer. No-one responded to the message he left. My only explanation is that we are using an interim call centre with limited capacity, but that's not much of an excuse for ignoring a basic courtesy and I will follow up.
3. [redacted] then emailed us through our website and has not received a reply. We are currently working through a huge backlogged number of enquiries as a result of a technical fault.

The only defence I could offer him is that First Release Sites are our opportunity to trial and improve on our methods – that includes design and construction, but also our community relations processes. We will learn and we will get better.

He seemed satisfied with the conversation and the apology.

Please be assured that we will use his feedback to improve our processes and change our processes locally.

We'd welcome any feedback from your office and as well if there are other constituent enquiries we can help with, don't hesitate to call.

Regards

Mike Kaiser

[redacted]

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**From:** [redacted] **On Behalf Of** Windsor, Tony (MP)  
**Sent:** Tuesday, 26 October, 2010 11:09 AM  
**To:** Mike Kaiser  
**Subject:** FW: National Broadband Network

Dear Mike,

Further to our telephone conversation of today's date, I have spoken with [redacted] and he has given me permission to provide you with his contact details so that you may be able to ring him to discuss his concerns. To that end, I have forwarded you a copy of his email to Mr Windsor, dated 22 October 2010.

I have advised [redacted] that he can expect a phone call in the near future and he has advised that he looks forward to an opportunity to discuss his concerns more fully.

Thank you again for your assistance in this matter.

Kind regards

[redacted]  
Electorate Officer  
Tony Windsor MP  
Federal Member for New England

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**From:** [redacted]  
**Sent:** Friday, 22 October 2010 7:48 AM  
**To:** Windsor, Tony (MP)  
**Subject:** National Broadband Network

Dear Tony

Like you, I'm a keen supporter of the NBN but I'm a bit concerned about the roll out here in Armidale.

According to the map on the NBN web site, we live a couple of blocks outside the area due to be connected in this current phase of work.

However, we got a leaflet in our mail box a few weeks ago, saying that work would start shortly in our street, and that if we wanted a free connection to the house, we should apply (from memory) no later than 7 September. We actually received the leaflet a day or two after the cut off date. I wasn't too worried because of the fact that we live outside the area, and anyway my friend, who does live within, the area had received a form to complete which we hadn't. So I just thought it was an error, but to be sure I called the phone number on the leaflet we got, only to get a recorded message saying they would ring back.

Well I left a message but no one rang back. This happened a couple of times.

Anyway, the blokes are currently outside my house laying cable along [redacted]. They say they are doing the whole town. Well I want my free connection, so I sent a email via the NBN web site seeking clarification and letting them know that I wanted a connection.

Well, they didn't reply, or even acknowledge receipt. As a result, I have no idea what's going on and am worried that there will be no connection to my house.

Perhaps you could establish what principles are in place here for connection. I'm also concerned about the large number of rental properties. If all they get is a slip in the mail box which the tenant may ditch, how will the owner know they have to opt in? Will these houses not be connected?

The Opposition - and predicatbaly *The Australian* newspaper - are running stories about ineptitude and inefficiency. As Mandy Rice-Davis once said "Well they would, wouldn't they." Nevertheless, the lack of information in my case, and failure to reply to enquiries, gives them some mileage.

Any information gratefully received.

[redacted]

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[redacted]

[redacted]

**From:** Nuttall, Graham (T. Windsor, MP) [Graham.Nuttall@aph.gov.au]  
**Sent:** Tuesday, November 02, 2010 10:15 AM  
**To:** Mike Kaiser  
**Subject:** FAQ on National Broadband Network

Hi Mike

We are putting together Tony's next newsletter to come out first week in December.

We would like to include a Frequently asked Questions about the NBN busting the myths being pedalled by the "nay sayers"

Do you have such a document readily available please that we could include – just a one pager or if longer something we could pick a few out of like costings and speeds

Many thanks

Graham

***Graham Nuttall***  
***Adviser***  
***Tony Windsor MP***  
***Member for New England***

***Tamworth***    ***02 6761 3080***  
***Canberra***    ***02 6277 4722***  
***Mobile***

**From:** Mike Kaiser  
**Sent:** Tuesday, November 02, 2010 9:23 PM  
**To:** Nuttall, Graham (T. Windsor, MP)  
**Subject:** Current arguments and counter arguments  
**Attachments:** Current arguments and counter arguments.docx

Graham,

Here is a work in progress version of a document we are developing which seeks to deal with the top 10 myths we encounter. The important thing to note is it is not finished and is far from release-able. I provide it however on the basis that it might help you in the exercise you mentioned. If there's anything you develop that you'd like us to look at before you issue it, we'd be happy to help.

Let me know if I've missed the mark, or if you need something else.

Mike

*10 NBN myths and counter arguments*

**1. ARGUMENT: The Government should have done a cost benefit analysis**

***COUNTER ARGUMENT:***

Both **domestic and international studies** have long demonstrated that the benefits of broadband far outweigh the costs:

- The Australian Local Government Association's State of the Regions Report (2005-06) drew the direct link between broadband availability, economic growth and Australia's export success
- A United Nations Broadband Commission Report (2010) recognised that broadband is one of the most powerful tools ever devised to drive social and economic development and outlined the role of government as enablers.
- A UK report by the regulator, OFCOM (2010), found that high speed broadband services directly benefits older and disabled people in all areas of life including health and wellbeing, work and education and leisure. It increases social engagement and reduces social isolation This same report found that high speed broadband:
  - improves compliance with medical regimes,
  - provides easier ways for professionals to provide care services for end-users, and
  - improves users' sense of security and safety.
- A US study (2010), which directly addressed the benefits of a fibre network, estimated US\$160 billion economic benefit over 4 years. This same study estimates an annual increase in jobs of more than 210,000. Productivity growth (labour, manufacturing and technology), national competitiveness and innovation are all a function of access to affordable broadband infrastructure.
- An OECD study (2009) found you only need cost savings of between 0.5% and 1.5% in each of four sectors (health, education, electricity, transport) over ten years to justify the cost of building an NBN.

The Commonwealth Government established the National Broadband Network to address the three-fold challenge of:

- Australia's ageing telecommunications infrastructure
- The exponential increase in data consumption by Australia (with a quadrupling of data consumption in the past four years alone);
- structural reform of Australia's telecommunications industry.

*10 NBN myths and counter arguments*

**2. ARGUMENT: It's more responsible to invest a smaller amount of money in private sector solutions to address blackspots.**

***COUNTER ARGUMENT:***

A standardised and universal network reaching 100% of Australian premises will:

- a) be able to deliver nation-wide eHealth and remote education services
- b) repay all government equity contributions within the normal lifetime of a telecommunications network.
- c) generate a return for government.

A subsidy to the private sector to cover blackspots would result in a patchwork of technologies and a continuation of Australia's current broadband infrastructure challenges.

Private subsidies to address blackspots will also not address the need for fundamental industry reform.

Only the NBN model, a wholesale-only network, will create real retail competition which will in turn drive lower prices.

**3. ARGUMENT: Creating a monopoly will destroy competition and choice.**

***COUNTER ARGUMENT:*** In many areas of Australia there is currently limited competition and choice in retail broadband services.

The current state of Australia's telecommunications industry has not delivered real retail price competition or infrastructure investment in many areas of Australia, particularly regional Australia.

Offering the same wholesale price nationally, irrespective of geography or technology, will enable more retail competition and more choice in more places. This is because more players can enter the market and offer more choice in the retail area.

Only a publicly owned wholesale monopoly will have the capacity to cross-subsidise the provision of services in regional and remote Australia so that real price competition can occur outside of Australia's metropolitan centres, lowering the cost of doing business for those living and working in those areas.



*10 NBN myths and counter arguments*

**4. ARGUMENT: People will have no choice but to take an NBN service because the existing copper line will be decommissioned.**

**COUNTER ARGUMENT:** The copper network was deployed after WW2, it is in some areas more than 60 years old. Australia's existing telecommunications infrastructure requires an urgent upgrade.

NBN Co, in partnership with Telstra, will be replacing Australia's ageing copper telecommunications wires with internationally proven technology – fibre network which is made of glass, a very robust material that does not degrade.

When the National Broadband Network is deployed, people will be able to simply plug their normal telephone back in the wall, into a new socket called a "Network Terminating Unit" or NTU.

After the NBN is deployed, Australians will have a greater choice of providers than ever before with a large number of retail service providers offering all kinds of services.

For a period of ten years, any existing fixed broadband infrastructure remain the responsibility of and is to be maintained by Telstra Corporation Ltd.

**5. ARGUMENT: The trend is towards wireless services, not fixed line.**

**COUNTER ARGUMENT:** Mobile networks (like 2G or 3G networks) are completely different to fixed wireless networks.

Mobile networks have less capacity than fixed wireless network and are configured for a greater number of users. Every mobile phone tower base station is connected by fibre because "spectrum" (which is what is used to transmit data wirelessly), is a very scarce resource.

Wireless speeds depend on distance and the number of users within the specific cell site – it is a finite resource.

There are many devices like iPhones and iPads which operate wirelessly, however these devices have the option of roaming either on a mobile network (like a 3G network) or on a Wi-Fi network.

For example, an iPhone may use a 3G network while the user is out and about - on a train or at the beach. But that same iPhone will often use a Wi-Fi network if in a cafe, at home or at work. A Wi-Fi network is often created using fibre to the premise (fixed) line infrastructure then uses available spectrum within a small determined area on a password basis for users to access the technology.

*10 NBN myths and counter arguments*

This is delivered using a wireless router which also doubles as wireless inside wiring. Many larger applications can only be accessed using a Wi-Fi network which is created using fixed line infrastructure.

Mobile networks across the world are feeling the strain of the increased demands of new applications following the popularity of iPhones and iPads, for example:

- London's O2 experienced an 18 fold increase in data traffic last year
- Last year AT&T announced a spend of \$18 billion to meet surging demands on its 3G network

According to the Cisco® Visual Networking Index globally, mobile data traffic will double every year through 2014, increasing 39 times between 2009 and 2014. Mobile data traffic will grow at a compound annual growth rate (CAGR) of 108 percent between 2009 and 2014, reaching 3.6 exabytes per month by 2014.

So even though the trend is towards increasingly wireless devices, to operate they require a mix of mobile AND fixed wireless networks.

NBN Co will be building a mix of infrastructure including 93% fibre, 4% fixed wireless and 3% satellite.

**6. ARGUMENT: The benefits of the network can't be realised by end users without expensive in-house wiring.**

**COUNTER ARGUMENT:** Contrary to reports in some of Australia's less informed sections of the media, inside wiring does not cost the end-user several thousand dollars. In fact the cost is closer to \$100 to \$200 for a wireless router which provides wireless in-home coverage, obviating the need for in-home fixed wiring. There are other solutions which are also commercially available which use the existing electricity lines within a house to transmit broadband signals.

When an Australian householder wishes to activate the NBN connection, they will select a retail service provider and NBN Co will install a Network Terminating Unit inside each premise (house, apartment, business) free of charge which will have 4 data ports and 2 voice ports which can be used to connect customer equipment to the network. This alone will be sufficient to dramatically improve

*10 NBN myths and counter arguments*

a householder's broadband experience. It is then up to each individual household as to how they decide to configure the inside wiring of their premise in consultation with their Retail Service Provider depending upon the services and plan they choose, in the same way as occurs now with Pay TV and telephone installation.

The Tasmania experience

Currently in Tasmania service providers including iiNet, Primus and Internode are making available special offers for connection to the NBN, many of which include free installation or other components. Later this year Telstra will also begin offering services as a retail service provider on the NBN network in Tasmania.

In Tasmania, fewer than 3% of live premises have requested from RSPs any active fixed inside wiring. Tasmanians have the option of installing a new socket to wire in their existing telephone wiring throughout the premise including the wiring from that socket to the NTU (Network Terminating Unit), they do this as part of facilitating the FNN (Full National Number) porting on the spot. The estimated cost has been approximately \$175-\$300 per customer for the minimal customers who have had it done.

It is worth noting the internal Network Terminating Units are located where end users most use the services which reduces the amount of in-premise wiring required. Furthermore, the majority of end users are either using cordless phones plugged directly into the NTU for voice, and wireless routers for data, which means minimal or no re-wiring in these situations.

**7. ARGUMENT: The cost per household of building the NBN can never be recovered without forcing people to pay higher prices for broadband services.**

**COUNTER ARGUMENT:** The Government's Implementation Study indicates that a national network can be provided with an investment of \$26B of taxpayers' funds. Modelling from the Implementation Study indicates it is likely that the investment would be returned to taxpayers over time, with an annual return of 6 – 7% to the shareholder.

As the table below indicates, NBN Co's cost per head of population is comparable with other publicly funded major telecommunications infrastructure projects.

## Relative cost of publically funded networks

	1870	1950	2010
Telecommunications Infrastructure	Overland telegraph	Copper Customer Access Network	National Broadband Network
Estimated cost to public purse in today's AUD\$	\$0.9 Billion <sup>1</sup>	\$10 Billion <sup>4</sup>	\$27 Billion
Australian population	1.6 Million	8.1 Million	22.4 Million
Estimated cost per head of population	\$600 / person <sup>2</sup> \$5,365 / person <sup>3</sup>	\$1,222 / person	\$1,204 / person

**Note:**  
<sup>1</sup> Funded by SA State Government. 60% State's annual budget)  
<sup>2</sup> Australia wide  
<sup>3</sup> South Australia – the only state that funded the project  
<sup>4</sup> In 2009, £42 million. In 1945 is worth around £5,920,000,000 using the share of GDP, calculated using: <http://www.measuringworth.com/index.html>. Then converted to AU\$10,307,900,000 (using rates on 1 December 2009) on <http://www.oanda.com/>

Source: Australian Historical Population Statistics (2008)

NBN Co will be providing a long term return and will be covering our costs relatively quickly.

Without factoring in any social, economic or productivity benefits that the NBN will provide, the returns predicted by our business case will be very acceptable to the Government.

NBN Co's business case requires equity funding by the Government of around \$27 billion. This is not the total capital costs, as NBN expects to raise debt, without Government guarantees, of at least \$10 billion.

The Telco and Finance professionals within NBN Co that have built this business case are experienced business people who have been involved in running some very large companies and know how to assess risk.

It is also the case that the Heads of Agreement with Telstra both reduces the total costs of the build and provides a level of assurance to the revenue line.

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So far from being a “white elephant” the NBN can provide an acceptable return for the Government. Taxpayers will get their \$27 billion investment back with interest and they will get a network they can use for decades.

**8. ARGUMENT: Ordinary households don't need 100mbps or 1gbps and those speeds exist for those who do need it.**

**COUNTER ARGUMENT:** Predicting what ordinary households need or don't need is a dangerous business.

Since 2006 the volume of data downloaded has more than quadrupled from 36,232 TB in 2006 to 155,503TB in 2010 (source: ABS)

These trends are echoed by the Cisco® Visual Networking Index, which estimates that by 2014, the various forms of video (TV, VoD, Internet Video, and P2P) will exceed 91 percent of global consumer traffic. Furthermore, by 2014 global online video will approach 57 percent of consumer Internet traffic (up from 40 percent in 2010).

Fibre to the premises will ensure that people sitting at home using their laptop, iPod or iPad will be able to use routers inside their houses to enjoy higher speeds to continue such trends.

Our society is both aging and living longer. Applications delivered over NBN infrastructure will enable more Australians to live in their own homes longer, with in-home monitoring and high definition video allowing the elderly to communicate regularly with family and health professionals.

In Korea, a country also facing challenges of an aging population, “Silver Cities” have been built to cater specifically for elderly residents with round-the-clock monitoring and embedded technology to improve quality of life.

Providing Australia's homes with access to affordable broadband infrastructure could lead to a substantial reduction in the number of elderly Australians moving into low dependency aged care facilities.

## 10 NBN myths and counter arguments

		Australian Bureau of Statistics								
		Jun Qtr 2006	Sep Qtr 2006	Mar Qtr 2007	Dec Qtr 2007	Jun Qtr 2008	Dec Qtr 2008	Jun Qtr 2009	Dec Qtr 2009	Jun Qtr 2010
81530DO004_201006 Internet Activity, Australia, Jun 2010										
Released at 11:30 am (Canberra time) Mon 20 Sep 2010										
Table 1 Volume of data downloaded by access connection, for ISPs with more than 1,000 active subscribers										
Volume of data downloaded										
Dial-up	'000	1,498	1,571	1,469	2,332	1,597	1,079	466	294	280
Broadband										
Fixed line broadband	'000								113,410	141,892
Wireless broadband	'000								14,251	13,330
Broadband	'000	34,734	33,136	40,610	53,961	53,837	80,274	98,782	127,661	155,222
Total	'000	36,232	34,707	42,079	56,293	55,434	81,352	99,249	127,954	155,503
Proportion of data downloaded										
Dial-up	%	4	5	3	4	3	1	0	0	0
Broadband										
Fixed line broadband	%								89	91
Wireless broadband	%								11	9
Broadband	%	96	95	97	96	97	99	100	100	100
Total	%	100	100	100	100	100	100	100	100	100
© Commonwealth of Australia 2010										

By way of example, of technology adoption, the number of years it took to reach 50 million users:

- Radio: 38 years
- TV: 13 years
- Internet :4 years
- iPod :3 years
- Facebook added 100 million users in less than 9 months
- iPod applications downloaded hit 1 billion in 9 months

SOURCE: <http://www.youtube.com/watch?v=sIFYPQiyhv8>

## 9. ARGUMENT: Why are consent rates and take-up rates so low?

**COUNTER ARGUMENT:** Consent rates are not an indication of NBN Co's success or failure.

Consent rates are directly related to NBN Co's ability in a limited time frame to contact the owner of every premise to seek their written consent.

In the case of Tasmania, the three pre-release sites, the average consent rates were around 50%. In light of people's preparedness to sign up for a service that a year ago did not even exist, NBN Co

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contends that 50% is a figure we should be pleased with. As time progresses NBN Co expects its customers, the retail service providers, to run their own campaigns to drive increased levels of services and activation. Furthermore, building on existing trends of the exponential rate of increased consumption, NBN Co anticipates Australians will embrace the opportunity to receive competitively priced broadband services from a variety of retail service providers.

In NBN Co’s first release sites on mainland Australia, the consent rates are actually very high.

	ARMIDALE	BRUNSWICK	KIAMA	TOWNSVILLE	WILLUNGA
<p>CONSENTS</p> <p>(as of 15 October 2010)</p>	87.2%	Consent campaign underway	74.3%	53.7%  (approx. 64% with Defence and public housing)	84%

NBN Co is designing and building a national, open-access, wholesale-only network. This network will be made available to retail service providers on equivalent terms. We expect that there will be a wide range of competing RSPs offering services in any given area after the rollout of the NBN. There will be some considerable time between the rollout in an area and the decommissioning of the copper, during which RSPs will be marketing to end-users to attract them to an NBN-based service.

When a home-owner or business accepts a line from the street to the premises during the time of construction they are not committing to a service, but need to contact an RSP to order a service after the network is activated in the area. At this point NBN Co will install a network terminating unit that allows a service to be activated. If they have not accepted a line during the construction phase, they also need to contact an RSP to activate a service, at which time both the line and the NTU will be installed.

The take-up rates in Tasmania are on par with expectations held by both NBN Co and the Implementation Study.

Take-up rates to date are a direct reflection on how many premises have been in a position to migrate to a new service – those people who are for example at the end of their respective contracts with their existing retail internet service provider.

Between 1998 to 2008-09, household access to the internet at home has more than quadrupled from 16% to 72%, while access to computers has increased from 44% to 78%. (source: ABS)

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During the past 20 years, the number of mobile telephones per 1000 population has increased more than ten-fold from 11 in 1990 to 1025 in 2007 (Source: How Australia Compares 2nd Edition Rodney Tiffen and Ross Gittens CUP 2009)

**10. ARGUMENT: Why can't the existing HFC cable be used?**

The Hybrid Fibre Coaxial (HFC) cable is a "souped up" version of copper. HFC only covers around 2 million premises and only in inner metropolitan Australia.

HFC has a higher bandwidth capability than copper but because of the design of HFC systems it has symmetry problems. While it can provide high speeds it is not so good at providing symmetrical broadband services that you need for, for example, two-way videoconferencing.

HFC is also a shared medium so it is load dependent.

Most importantly, HFC won't offer what NBN can – ubiquity and an integrated network.



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**From:** Mike Kaiser  
**Sent:** Friday, November 12, 2010 12:30 PM  
**To:** Nuttall, Graham (T. Windsor, MP)  
**Subject:** RE: [redacted] - unpaid NBN Co subcontractor account

On it.

Will let you know.

Mike

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**From:** Nuttall, Graham (T. Windsor, MP) [<mailto:Graham.Nuttall@aph.gov.au>]  
**Sent:** Friday, 12 November, 2010 12:01 PM  
**To:** Mike Kaiser; David Harrison  
**Subject:** FW: [redacted] - unpaid NBN Co subcontractor account

Hi Mike/David

Not sure if there is anything you can do to assist with this but any help would be much appreciated

I understand it is a commercial arrangement but ...

Regards

Graham

*Graham Nuttall*

*Adviser*

*Tony Windsor MP*

*Member for New England*

*Tamworth 02 6761 3080*

*Canberra 02 6277 4722*

*Mobile* [redacted]

[redacted] - unpaid NBN Co subcontractor accommodation accounts.pdf>>

NBN Co File No. 10/11-09 - Document 5

Exempt under s47G and s47F of the FOI Act

[Redacted]

To: tony.windsor.mp@aph.gov.au  
Subject: National Broadband Roll Out

Dear Tony

I am writing to you to request your assistance in obtaining payment for accommodation provided by us to one of the subcontractors providing services to the National Broadband Network being rolled out in the Armidale area.

During the months of September and October we, the [Redacted] provided rooms for [Redacted] contractor [Redacted] based in [Redacted]. The first invoice was paid by direct credit to our account, and believing that the subsequent invoices would be paid the same way, in good faith we provided accommodation on a seven day account basis. We were told by a [Redacted] who we believe to be [Redacted] of the owners that there would be no problem with the account.

We have been chasing payment of this account since late September and became suspicious in early October when our phone calls were ignored. [Redacted]

As this is a national project underwritten by the Australian Federal Government, we find it hard to believe that this company is unable to meet its financial obligations. We are very disappointed that a small business such as ourselves has been burned by a contractor to this national project. We also feel obligated to warn other establishments in the accommodation industry to be wary of contractors providing services to the NBN roll out. We are wondering if this is another government white elephant like the roof insulation scheme that is going to hurt a lot of small operators like us.

We would appreciate your assistance in finding out how we can get payment for our services rendered. It is hard to express our dismay at being defrauded by these people, and we will make a point of getting our story out to as many people as possible to prevent others suffering this fate.

Thank you for your time, we look forward to hearing from you.

I enclose a copy of their statement showing the accumulated charges.

Yours sincerely

[Redacted Signature]

[Redacted]

Phone [Redacted]

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**From:** Nuttall, Graham (T. Windsor, MP) [Graham.Nuttall@aph.gov.au]  
**Sent:** Tuesday, November 16, 2010 8:47 AM  
**To:** Mike Kaiser  
**Subject:** RE: NBN Rollout

Many thanks Mike

Will get back to [ ] and allay her concerns

Cheers

Graham

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**From:** Mike Kaiser [mailto:MikeKaiser@nbnco.com.au]  
**Sent:** Tuesday, 16 November 2010 8:37 AM  
**To:** Nuttall, Graham (T. Windsor, MP)  
**Subject:** RE: NBN Rollout

Graham,

Have looked at this and spoken with some people overnight.

I believe that the 'staff of the NBN' are contractors that are performing the design activities required to cost the Multi Dwelling Unit installation (ie the colleges). NBN Co is picking up the cost of this work.

They may have told [ ] that they are doing estimating work to provide a quote, however the quote is to NBN Co, not the college. It is highly likely that there has been an assumption on [ ] part that the quote was for the college, especially if she has assumed that the people are NBN staff (which they are not).

The other statement that the NBN would be rolled out "if and when there was a problem with the existing network" is not a practical solution. The NBN network requires fibre to each ONT (inside every room), which is why the existing cabling cannot suffice.

As I mentioned the Uni is very supportive of this. It will provide residential students a far superior service, which the Uni recognises.

If you need anything further let me know.

Mike

---

**From:** Nuttall, Graham (T. Windsor, MP) [mailto:Graham.Nuttall@aph.gov.au]  
**Sent:** Monday, 15 November, 2010 6:59 PM  
**To:** Mike Kaiser  
**Subject:** FW: NBN Rollout

---

Hi Mike

Can you shed any light on this please?

Many thanks

Graham

*Graham Nuttall  
Chief of Staff  
Tony Windsor MP  
Member for New England*

*Tamworth 02 6761 3080  
Canberra 02 6277 4722  
Mobile*

---

**From:**   
**Sent:** Friday, 12 November 2010 4:28 PM  
**To:** Windsor, Tony (MP)  
**Subject:** NBN Rollout

Dear Mr Windsor,

We are confused with the current rollout of the NBN in the Armidale area.

We have been advised that the current rollout of the NBN to the University of New England covers the installation of points to every room in College with the Government paying for these connections.

If this is indeed the case it seems to be duplicating a network which the University has already in place.

We understood that the NBN would be rolled out to the College and would then be available if and when there was a problem with the current network and one would presume that the NBN could then be connected via the existing wiring to the individual student rooms. We currently have staff of the NBN checking out the College in order to give a quote for the installation of the points to every room.

If the cost is to be carried by the Government why would they be working to provide the College with a quote?

If you are able to clarify the situation for us we would be grateful.

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**From:** Mike Kaiser  
**Sent:** Sunday, December 05, 2010 7:02 PM  
**To:** Nuttall, Graham (T. Windsor, MP)  
**Subject:** RE: NBN in Tenterfield??

Graham,

I'm not sure I ever answered this one for you. Apologies. It slipped through.

We aren't planning too far in advance at the moment until we get a Government response to the business case so I wouldn't like to nominate a time for Tenterfield. We will be announcing further stages of Armidale soon.

Mike

---

**From:** Nuttall, Graham (T. Windsor, MP) [<mailto:Graham.Nuttall@aph.gov.au>]  
**Sent:** Wednesday, 24 November, 2010 12:31 PM  
**To:** Mike Kaiser  
**Subject:** NBN in Tenterfield??

Hi Mike

Several of the techie savvy people in Tenterfield are wondering when they may see the benefits of the NBN Co Fibre network in their streets?

Is there a deployment schedule yet please?

Hope you can assist

Many thanks

Graham

*Graham Nuttall  
Chief of Staff  
Tony Windsor MP  
Member for New England*

*Tamworth 02 6761 3080  
Canberra 02 6277 4722  
Mobile*

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**From:** Nuttall, Graham (T. Windsor, MP) [Graham.Nuttall@aph.gov.au]  
**Sent:** Wednesday, January 12, 2011 11:28 AM  
**To:** Mike Kaiser  
**Subject:** NBN in times of flood

Hi Mike

Just a thought from a mate

As you are aware I have been affected by floods for some time and now getting ready for the big one.   
 In times of disaster, communications save lives. I hope that the NBN can be built in such a way that it is robust in times of disaster. We are expecting around 20,000 residential properties and thousands of commercial properties to go under in Brisbane alone. A third of Ipswich is expected to be inundated.

Cheers

Graham

---

**From:** Mike Kaiser  
**Sent:** Monday, December 06, 2010 11:21 AM  
**To:** [redacted] (T. Windsor, MP)  
**Cc:** Darren Rudd  
**Subject:** Re: NBN Rollout in Armidale NSW

Darren, please call [redacted] about all this. Please confirm with [redacted] and me that it's been done.

Thanks.

Mike

Sent from my iPhone

On 06/12/2010, at 11:20 AM, "[redacted] (T. Windsor, MP)" [redacted] wrote:

Hi Mike,

Thank you again for that information. I have contacted the constituent and passed it on.

[redacted] has advised that their information is the outside connection will need to be made as closely as possible to where the inside connection will be. [redacted] has advised the connection point to the house will need to be made at the back of the premises. He has also advised there is a water pipe in the front yard that may cause some problems if the staff aren't aware of its presence.

Would it be possible to have someone call [redacted] prior to [redacted] so they can explain the location of the water pipe and where the connection will need to be made?

Regards

[redacted]

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**From:** Mike Kaiser [mailto:MikeKaiser@nbnco.com.au]  
**Sent:** Monday, 6 December 2010 10:15 AM  
**To:** [redacted] (T. Windsor, MP)  
**Subject:** RE: NBN Rollout in Armidale NSW

[redacted]

I have checked with our construction team and they will deliver a letter one week out advising they will be in the street and connecting premises, leaving the call centre number for any questions. We do not need residents to be home. The letter is a courtesy. We will connect if consent has been given. At this stage this will be all external work – taking a cable from the street and connecting it to the side of the home. Internal work (bringing the cable inside the home and installing a Network Termination Unit) will come later after the resident orders a service through a retailer.

Hope this helps.

Mike Kaiser

[redacted]

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**From:** [redacted] (T. Windsor, MP) [redacted]  
**Sent:** Wednesday, 1 December, 2010 3:18 PM  
**To:** Mike Kaiser  
**Subject:** RE: NBN Rollout in Armidale NSW

Mike

Thank you for getting back to me. I have conveyed this information to [redacted] and she was extremely pleased with the response.

There is one small problem, however, [redacted] will be away from their home between [redacted] so they won't be available when NBN is planning to contact them and install the lead ins. Is there anything you can do to help them with this?

Thanks

[redacted]

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**From:** Mike Kaiser [mailto:MikeKaiser@nbnco.com.au]  
**Sent:** Wednesday, 1 December 2010 1:21 PM  
**To:** [redacted] (T. Windsor, MP)  
**Subject:** RE: NBN Rollout in Armidale NSW



[redacted]

Sorry I've taken a while on getting back to you on [redacted] query.

The lead ins for [redacted] will commence the [redacted] Lead ins are the cable from the street to the home and is effectively what [redacted] has consented to. We will be in touch with all residents of [redacted] who have consented to this work in the [redacted] to arrange a suitable time to do the installation.

While the lead in makes a home "NBN ready" it is insufficient for a service. Next year retail service providers (around the middle of the year) will market their broadband packages in the area and if [redacted] orders a service from a retailer we will be back to install a Network Termination Unit (NTU) inside her home at a location of her choosing. This installation is free and it makes sense for the resident to choose a location near their main broadband use – eg in a study near a computer. It may be that a resident chooses to plug a wireless router into the NTU to give them wifi coverage throughout their home. In most cases no in-home wiring will be necessary. If the resident wants to install wiring to achieve a particular outcome within their home, this will be at their expense (unless it's part of a retail deal – which NBN Co will play no part in). Please assure [redacted] though that our free installation of an NTU inside a home is usually sufficient to dramatically improve the broadband experience without going to additional expense.

In respect to the question of the seemingly large amount of people in the street, I'm told the street has had a large amount of rock that needed to be drilled through. This has added to the complexity of the project and the time taken in the street. We are however confident that the crews will be finished in [redacted] by the end of next week.

I hope this information is of assistance to your constituent.

We would of course be willing to contact/ visit her, but would only do so if she would welcome that.

Regards

Mike Kaiser

---

**From:** [redacted] (T. Windsor, MP) [redacted]  
**Sent:** Tuesday, 30 November, 2010 3:33 PM  
**To:** Mike Kaiser  
**Subject:** RE: NBN Rollout in Armidale NSW

Mike,

Thank you for getting back to me so quickly.

I've spoken with [redacted] and passed on the information from your email. [redacted] advised she was aware there was no actual connection cost but has now advised me she has heard rumour they may have to have their whole house "re-wired" to enable the connection and if that is true, wants to know at whose expense that will need to be done.

Sorry about the confusion.

Regards

[redacted]

Electorate Officer

Tony Windsor MP

Federal Member for New England

Telephone: 02 6761 3080

Facsimile: 02 6761 3380

Email: [redacted]

Postal: PO Box 963, Tamworth, 2340.

---

**From:** Mike Kaiser [mailto:MikeKaiser@nbnco.com.au]  
**Sent:** Tuesday, 30 November 2010 3:22 PM  
**To:** [redacted] (T. Windsor, MP)  
**Subject:** Re: NBN Rollout in Armidale NSW

[redacted]

We will get you an answer, but you can reassure your constituent there will be no cost.

On the time taken and workforce numbers, please remember that these first release sites are about testing and learning so we can get faster in future. We have always said that.

Will get back to you.

Mike

Sent from my iPhone

On 30/11/2010, at 3:09 PM, "[redacted]" (T. Windsor, MP)"

[redacted] wrote:

Dear Mike

I have had a telephone inquiry from a constituent in Armidale who lives in the area where the NBN is currently being rolled out. She has advised me that she and her husband have agreed to have the connection made, but since that time have received no information regarding the costs associated with the connection, who will be approaching them about it or when they will be approached. Any information and/or assistance you can provide in this regard would be greatly appreciated.

As an aside (and not the reason for her call), she also mentioned how she is amazed at how many men are working in the local streets and how long it is taking to install the cable in Armidale and that being the case, wonders how long it will take for a national installation to take place.

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If it is of assistance to you, the constituent's name is  and her address is  Her telephone number is

Kind regards

Electorate Officer

Tony Windsor MP

Federal Member for New England

Telephone: 02 6761 3080

Facsimile: 02 6761 3380

Email:

Postal: PO Box 963, Tamworth, 2340.

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**From:** Nuttall, Graham (T. Windsor, MP) [Graham.Nuttall@aph.gov.au]  
**Sent:** Monday, January 10, 2011 4:49 PM  
**To:** Mike Kaiser  
**Subject:** RE: NBN Armidale - House Not Connected

Thanks Mike

Enjoy your break

Cheers

Graham

-----Original Message-----

From: Mike Kaiser [<mailto:MikeKaiser@nbnco.com.au>]  
Sent: Monday, 10 January 2011 4:44 PM  
To: Nuttall, Graham (T. Windsor, MP)  
Cc: Trent Williams  
Subject: Re: NBN Armidale - House Not Connected

Graham, I'm on leave at the moment. Trent Williams will get back to you on this. Any problems, let me know.

Happy new year.

Mike

Sent from my iPhone

On 10/01/2011, at 3:40 PM, "Nuttall, Graham (T. Windsor, MP)"  
<Graham.Nuttall@aph.gov.au>  
> wrote:

> Hi Mike  
>  
> Happy New Year to you - hope you have had a break and now ready for a  
> big year of rollout  
>  
> Can you assist with this one please  
>  
> Many thanks  
>  
> Graham  
>  
>  
> Graham Nuttall  
> Chief of Staff  
> Tony Windsor MP  
> Member for New England  
>  
> Tamworth       02 6761 3080  
> Canberra        02 6277 4722  
> Mobile           
>  
>  
>  
>

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> -----Original Message-----  
> From: [redacted] [mailto:[redacted]]  
> Sent: Saturday, 1 January 2011 4:49 PM  
> To: Windsor, Tony (MP)  
> Subject: NBN Armidale - House Not Connected  
>  
> Hello Tony,  
>  
> I've tried contacting the NBN but lines seem to be closed...  
>  
> When I was at my parents rental property doing some house maintenance  
> in  
> [redacted] recently (Which I may move into sometime soon due to the  
> NBN) I noticed a majority of the houses have had their terminal box  
> installed on the side of the house apart from ours.  
>  
> Currently we don't have any tenants occupying the premises as of yet  
> due to renovations.  
>  
> I'm wonder why a note or no effort in contacting myself or my  
> parents to  
> notify us that they, the NBN installers, are in the street installing  
> the terminal boxes on the side of the house.  
>  
> If you are able to shed any light as to why we were not notified that  
> would be great.  
>  
> Regards,  
> [redacted]  
>  
> Happy New Year.  
>  
>  
>  
> Sent from my iPhone  
>

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**From:** Mike Kaiser  
**Sent:** Monday, February 07, 2011 4:44 PM  
**To:** Nuttall, Graham (T. Windsor, MP)  
**Subject:** RE: [redacted] letter re installation of fibre

Graham,

Please see below a possible form of words to inform your response to [redacted]. For the record we think there's a bit of exaggeration in his letter about how many crews he's seen when, but basically we've always said these first release sites are about trialling our construction and design methods and so they are a lot more labour intensive than the job will be down the track. In other words, we'll get better at it as time goes on, as you'd expect.

If there's anything else I can help you with, or if you need an explanation of anything that's below, please let us know. I'm happy for you to say to [redacted] that you're "advised by NBN Co" of these things so that it's not Mr Windsor or you defending us.

Regards

Mike Kaiser

Dear [redacted]

Thank you for your letter dated 27<sup>th</sup> January entitled 'Concerns over NBN'.

I have sought advice from NBN Co in response to your letter and they have advised the following.

As you are aware, your property is situated in one of NBNCo's initial fibre optic design and build project areas. These areas are known by NBN Co as First Release Sites of which there are five on mainland Australia. NBN Co has explained that these sites are effectively trials of their construction and design methods so that they can "get things right" for their national build.

Each site represents a unique design and build challenge based on elements such as geographical, geological, climatic or urban density characteristics. To this end NBN Co is trialling within the first release sites different approaches to design and build as well as different workforce models where teams based on specific skill types are used to perform targeted activities such as trenching, hauling cable or placing conduit. NBNCo is also committed to building the network to agreed quality, environmental and safety standards. It is NBN Co's intention at this point to use every opportunity to test, validate and refine a range of different models so as to draw learnings and improve all aspects of our approach.

Given the trial nature of the work being undertaken, NBN Co advises that the work has been more labour intensive than what can be expected in future work sites.

In relation to the work specifically in your street, as part of the trial NBNCo undertook a quality inspection and found that there were certain things that needed to be changed in order to meet high standards. As such, the work was re-done to meet these standards.

**From:** Nuttall, Graham (T. Windsor, MP) [<mailto:Graham.Nuttall@aph.gov.au>]  
**Sent:** Thursday, 3 February, 2011 1:00 PM  
**To:** Mike Kaiser  
**Subject:** RE: [redacted] letter re installation of fibre

Thanks Mike

---

**From:** Mike Kaiser [<mailto:MikeKaiser@nbnco.com.au>]  
**Sent:** Thursday, 3 February 2011 12:56 PM  
**To:** Nuttall, Graham (T. Windsor, MP)  
**Subject:** Re: [redacted] letter re installation of fibre

Onto it Graham.

Sent from my iPhone

On 03/02/2011, at 10:42 AM, "Nuttall, Graham (T. Windsor, MP)" <[Graham.Nuttall@aph.gov.au](mailto:Graham.Nuttall@aph.gov.au)> wrote:

Hi Mike

A query from a constituent in Armidale

Don't worry about the "political" comments at the end but just drawing your attention to the digging process – is this normal rollout??

Is there any comments we can provide back to the constituent?

Thanks

Graham

[redacted]

[redacted]





RECEIVED



Thursday, 27 January 2011

Mr Tony Windsor  
Tamworth. NSW

Dear Mr Windsor

**Re: Concerns over NBN**

I am one of the 'lucky' ones who are in the single small area of Armidale in which the NBN is currently being installed. I say 'lucky' as I have grave reservations about this process based on my observations of the roll-out to date. Let me explain:

It is several months since the first team of workers arrived in our street to begin the installation and since then I have been appalled by the number of visits those teams have made. These visits have involved digging trenches, filling them, disappearing for several days, returning and re-opening those trenches, filling them again and so on.

Finally, the last 7 metre link from the in-ground junction box was to be made to our house and it was this process which really concerned me in that it took FIVE, yes FIVE, different teams working on different days to make that link. The order of events was:

- 1) First team arrives and digs a narrow trench into which they placed the conduit and a length of orange twine. Fill in the trench and go away.
- 2) The second team arrived a few days later, opened the trench and used that orange twine to pull a white twine through. Fill the trench and go away.
- 3) Team three repeated this process but with something else pulled through. Fill in the trench and disappear into the middle distance
- 4) Team four finally dragged the actual fibre optic cable those challenging 7 metres and attached it to a small box on my wall. Fill in the trench - great, the job is done but wait, there's more
- 5) It was discovered a few days later that the conduit has been buried at too shallow (it was only 75mm below the ground surface and I have the photos to illustrate this) a depth so the fifth team arrives, digs it up and buries it deeper, fills in the trench and goes away.

I chatted to the guys doing the job and they rolled their eyes at the extent and complexity of what is a very simple process and wagered that the final cost for this enormous 'white elephant' will be in the vicinity of \$70 billion! A staggering budget overrun but my observations of this 5-step process to cover 7m led me to believe their estimates.

Mr Windsor, in the recent election you largely pinned your final decision to ally yourself with the Labour party on the NBN but I urge you to, seriously, consider urging Prime Minister Gillard to put the NBN on hold and use the funds to help rebuild Australia following the recent floods in Queensland, NSW, Victoria, Tasmania and West Australia. I do not feel that the NBN is essential for the good of the whole country but I do feel that everybody needs to be convinced that our government will respond positively to the kinds of disasters recently suffered by so many.

I have never petitioned a politician in my life but the wastage I have witnessed to date with the NBN and the recent floods has driven me to do so and I hope you, at least, give consideration to my proposal.

Thank you

Yours sincerely



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**From:** Nuttall, Graham (T. Windsor, MP) [Graham.Nuttall@aph.gov.au]  
**Sent:** Monday, April 04, 2011 4:48 PM  
**To:** Mike Kaiser  
**Subject:** RE: Fibre network if backbone passes thru/near small town

Thanks for your prompt reply Mike

Might have raised a few more questions too ☺

Certainly understand the FAN concept – like living under high tension electricity wires or beside the gas pipeline – you can't just run the wire or pipe to the farmhouse

Will come back to you

Cheers

Graham

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**From:** Mike Kaiser [<mailto:MikeKaiser@nbnc.com.au>]  
**Sent:** Monday, 4 April 2011 4:23 PM  
**To:** Nuttall, Graham (T. Windsor, MP)  
**Subject:** RE: Fibre network if backbone passes thru/near small town

Hi Graham,

Like most things, it's not that simple.

As a matter of Government policy we are obliged to provide fibre connections to premises in any town with greater than 1000 premises (note premises, not population).

That requires us to build a transit network going through those towns.

Then, again as a matter of policy, any town on those transit links with a premise count greater than 500 will also be connected. (This means some towns of between 500-1000 premises won't be connected if they are not on a transit link that we have to build to get to the 1000 premise towns.)

This all means that a fibre link may go through (or more likely near) a town with less than 500 premises that we won't fibre up. That's basically because the cost per premise in those cases becomes huge. It's not a matter of just connecting cable straight from the transit fibre to a premise – you need to establish a Fibre Access Node (FAN) which is like a fibre equivalent of a Telstra Exchange. FANs are capable of serving about 40,000 premises and are a significant (and expensive) bit of kit. And you absolutely need one even if you just want to serve a single premise. But the cost is effectively shared on a per premise basis and so the fewer premises the higher per premise cost. For towns less than 500 premises the per premise cost is huge and it becomes significantly more cost effective to serve them with wireless or satellite (even if there's a transit link nearby).

We know from trying to explain this that it's not easy to communicate and any advice you have for us would be appreciated. I know it just seems logical that if we have a cable going by, people wonder why we don't just connect.

I also understand that people think wireless and satellite are somehow inferior. While it's true that you can't achieve better than the basic 12 mbps on those technologies to start with, I also think people are likening them to their current experience on mobile wireless or satellite. The issue with current satellite services is that they are dimensioned for profit – ie operators wring every last drop out of a shared medium by getting more and more

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people on the service which means everyone's experience gets worse. Don't forget we are required to provide a certain service performance level and so we are designing to that service level, not to maximise profit. That will make a huge difference to people's experience. Our service will be better than most people in cities get on ADSL today.

I hope I've answered your question. If not let me know.

Mike

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**From:** Nuttall, Graham (T. Windsor, MP) [<mailto:Graham.Nuttall@aph.gov.au>]  
**Sent:** Monday, 4 April, 2011 3:33 PM  
**To:** Mike Kaiser  
**Subject:** Fibre network if backbone passes thru/near small town

Hi Mike

If the main fibre backbone goes thru or close-by a small town, will that town have the ability to hook up to it to receive high speed broadband?

Cheers

Graham

***Graham Nuttall***

***Office of Tony Windsor MP***

***Independent Member for New England***

***Tamworth 02 6761 3080***

***Canberra 02 6277 4722***

***Mobile***

---

**From:** Mike Kaiser  
**Sent:** Friday, May 27, 2011 4:34 PM  
**To:** Nuttall, Graham (T. Windsor, MP)  
**Subject:** RE: Re NBN roll out in Armidale

Hi Graham,

We're in discussions on procuring construction services at the moment which we have to settle before being able to progress the build in Armidale. As soon as we've sorted a deal that's reasonable for taxpayers we'll be away with the balance of Armidale.

In terms of wireless, we're going to shortly announce the vendor we've chosen to help us build the fixed wireless network and shortly after that (within a couple weeks) we'll be announcing the First Release Wireless Sites.

Great message! Made my day.

Mike

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**From:** Nuttall, Graham (T. Windsor, MP) [<mailto:Graham.Nuttall@aph.gov.au>]  
**Sent:** Friday, 27 May, 2011 12:36 PM  
**To:** Mike Kaiser  
**Subject:** FW: Re NBN roll out in Armidale

Hi Mike

Can you shed any light on the possible timing of the rest of Armidale and surrounds with wireless and satellite please

Thought the below might add some "lightheartedness" to your day or at least bring a ☺

Cheers

Graham

---

**To:** Windsor, Tony (MP)  
**Subject:** Re NBN roll out in Armidale

Mr. Windsor,

I have family in Armidale and in my naivety was very excited by Julia's announcement. However, my excitement was short lived. My family members neither live or work in the connected area and do not believe that they will ever be connected residentially. If and when will the rest of Armidale be connected allowing the residents to at least have the choice as to whether they take it up or not, or should they keep renewing the string between the tin cans for the foreseeable future.

Yours sincerely

---

**From:** Mike Kaiser  
**Sent:** Wednesday, June 08, 2011 11:14 AM  
**To:** Nuttall, Graham (T. Windsor, MP)  
**Subject:** RE: Clarification please

Hi Graham,

As you know NBN Co will have a service in place by 1 July that will take over, effectively, from the current ABG scheme. This service won't be as good as our ultimate service when we launch our own satellites in 2015, but will represent a much better experience than people are getting now.

Because it is based on limited currently available capacity, it is necessary to set eligibility criteria. The Government has decided those, in consultation with us about available bandwidth etc.

So, what they have asked us to do is carry over the "metro-comparability" test that applied under the AGB. This is designed to target rural and regional people who don't have access to an alternate broadband services, while at the same time not displacing existing commercial services where they meet the metro-comparable benchmark – to which there are actually three prongs, please see below.

*Metro-comparability #*

A metro-comparable broadband service is considered to be a service with the following features:

1. Access to the Internet at a peak Data Speed of at least 512/128 kbps and 3GB per month usage allowance (with no restrictions within these limits on downloads or uploads or usage time);
2. A price to the Customer over three years of no more than \$2500 including equipment, installation, connection, account establishment, travel costs and ongoing provision of the service; and
3. The Provider or Commercial ISP offering the broadband service can install the service within a reasonable period of time.

The full eligibility criteria are available at the following link.

<http://www.nbnco.com.au/wps/wcm/connect/downloads/announcement//Eligibility-Criteria-Interim-Satellite-Service.pdf>

As I mentioned, this Interim Satellite service represents a transitional phase until we get fixed wireless and our own long term satellite solution in place. Now that we've signed the wireless agreement, initial services are scheduled to be available from the middle of next year, with the network to be completed by 2015. This is also the year planned for the availability of the Long-term Satellite service.

Hope it help. Give me a call if you need anything more.

Mike

---

**From:** Nuttall, Graham (T. Windsor, MP) [<mailto:Graham.Nuttall@aph.gov.au>]  
**Sent:** Wednesday, 8 June, 2011 9:21 AM  
**To:** Mike Kaiser  
**Subject:** Clarification please

Hi Mike

The Quirindi Advocate has a statement in today's edition that

"Earlier this year NBN Co the company responsible for installing the network throughout Australia, signed contracts with Optus and IPStar to deliver Interim Satellite Service to bring forward access to the NBN in regional areas until its own satellite service is developed. However, NBN Co recently announced that regional broadband users will not be eligible for the service if they can access download speeds of 512 kilobits per second."

Could you please clarify?

Thanks

Graham

***Graham Nuttall***

***Office of Tony Windsor MP***

***Independent Member for New England***

***Tamworth 02 6761 3080***

***Canberra 02 6277 4722***

***Mobile***

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**From:** Mike Kaiser  
**Sent:** Friday, June 17, 2011 4:03 PM  
**To:** Nuttall, Graham (T. Windsor, MP)  
**Cc:** Rhonda Griffin; Darren Rudd  
**Subject:** RE: Registrations & Invite list as at 16 May

Yikes.

We'll get onto him.

Rhonda, can you please call Simon. You should also give him your numbers.

Mike

---

**From:** Nuttall, Graham (T. Windsor, MP) [<mailto:Graham.Nuttall@aph.gov.au>]  
**Sent:** Friday, 17 June, 2011 3:35 PM  
**To:** Darren Rudd  
**Cc:** Mike Kaiser  
**Subject:** RE: Registrations & Invite list as at 16 May

Hi Darren/Mike

Can one of you give Simon a call please in response to the below

Many thanks

Graham

*Graham Nuttall  
Chief of Staff  
Tony Windsor MP  
Member for New England*

*Tamworth 02 6761 3080  
Canberra 02 6277 4722  
Mobile*

Hi Graham

who would I talk to in Armidale to see how the NBN has progressed since the launch a couple of weeks ago?

I cant seem to find any contact numbers at the NBN and emails sent to media liaison have not been replied to.

cheers

---

**From:** Nuttall, Graham (T. Windsor, MP) [Graham.Nuttall@aph.gov.au]  
**Sent:** Monday, June 27, 2011 10:28 AM  
**To:** Mike Kaiser  
**Subject:** FW: NBN roll out ...Armidale

Hi Mike

Can you address the below please

Many thanks

Graham

***Graham Nuttall***  
***Chief of Staff***  
***Office of Tony Windsor MP***  
***Independent Member for New England***

***Tamworth 02 6761 3080***

***Canberra 02 6277 4722***

***Mobile***

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**From:**  [mailto:  
**Sent:** Sunday, 26 June 2011 9:03 PM  
**To:** Windsor, Tony (MP)  
**Subject:** NBN roll out ...Armidale

Dear Mr Windsor,

We were somewhat surprised today (Sunday 26th June, 2011) to receive a visit from two men in safety vests, claiming that they were measuring and surveying for the roll out of the NBN.

This is the first we have heard about it except for news items stating that Armidale will be amongst the first regional centres to be connected the system, which indeed has started in some institutions and residential areas.

We have received no contact or notification of any sort from anyone regarding the NBN.

As this appears to be a much publicised multi-billion national project, perhaps the following questions can be answered in a logical and brief manner-

1. What information will house holders be receiving?
2. When would we receive any information and in what form?
3. What is the process should we decide to be connected onto the NBN?
4. Do the contractors plan to carry out the installation work in consultation with a written agreement with householders guaranteeing –



- a/ Necessary landscaping
  - b/Any repairs to buildings, driveways, pathways, fences or other structures required
  - c/That any work carried out will be of a neat and professional standard
5. What are the implications should we not wish to be connected ?
  6. What costs will be levied to householders?

We wait for response by return Email.

Yours faithfully,



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**From:** Mike Kaiser  
**Sent:** Tuesday, June 28, 2011 12:43 PM  
**To:** Nuttall, Graham (T. Windsor, MP)  
**Subject:** RE: Glen Innes NBN questions

Graham,

Government has an arrangement in place with Telstra to ensure copper services are maintained in the 7% of the NBN footprint that will be served by wireless and satellite.

NBN Co is commencing an interim satellite service on 1 July using some existing satellite capacity. This is however limited and does not reflect NBN Co's ultimate satellite service.

NBN Co plans to launch 2 Ka Band satellites in 2015 to serve the broadband needs of approximately 3% of premises. This service cannot be compared to existing satellite services which are dimensioned to maximise profit (ie maximise the number of users across a fixed bandwidth giving each user a sometimes poor experience). Instead, NBN Co is dimensioning its satellite services on the basis of a service standard set by Government (not profit). Our satellite service will typically provide users with a broadband experience better than ADSL. It will certainly be an improvement for those "currently outside ADSL broadband services" (the words used by your constituent below).

Hope it helps. Let me know if you need more.

Mike

---

**From:** Nuttall, Graham (T. Windsor, MP) [<mailto:Graham.Nuttall@aph.gov.au>]  
**Sent:** Tuesday, 28 June, 2011 12:07 PM  
**To:** Mike Kaiser  
**Subject:** Glen Innes NBN questions

Your thoughts on this would be much appreciated Mike

Thanks

Graham

On another note can you ask your expert NBN advisers what happens to customers that are outside the current optic fibre and wireless solution for the NBN. From my research on the matter, customers will be offered a satellite solution for the NBN but will remain on their current arrangement for voice services. This will have an impact on people in your electorate. Many customers that are on cable or other USO solutions and currently outside ADSL broadband services will end up with a satellite solution. Current proposals for wireless at 2.3 gig will only cover customers in close proximity to a base station. With the New England area being very mountainous this distance could be a few kilometers at the very best. It seems to me the NBN will cater for customers on fibre and wireless but totally forgets those outside these areas. Who is going to maintain the current copper Telstra network when it is sold off? This is going to cost the Australian taxpayer again for many years to come.

When is there going to be another question and answer session on the NBN in the New England area?

---

**From:** Mike Kaiser  
**Sent:** Wednesday, June 29, 2011 12:55 PM  
**To:** Windsor, Tony (MP)  
**Subject:** RE: QUESTION ON THE NBN

No worries.

End users do not bear the cost of connection to the NBN. I don't know where  got that impression. If he could tell you then we could clarify that for him (through you, if you like).

But I can categorically say that NBN Co picks up the cost of all of the cabling and equipment to go from the street network to *inside a premise*, including the Network Termination Device (NTD) (a modem, effectively) *inside* the home and a power supply. At the moment it also includes battery back-up for their standard telephone service, although government has said it is still finalising its view on this.

Our installers will discuss the options with the customer and gain agreement on things like the location of the NTD, where the cabling will go (from the street to the premise we will usually follow whatever the current Telstra cable does – ie underground or overhead), etc.

The NTD will be placed within reason wherever the primary use of broadband will be – the study, the lounge room (for IPTV for example). It is easy to plug in a wireless modem from that point and achieve a high quality broadband connection anywhere in the house. If you want to do some in house wiring from the NTD to get cable to other rooms, that would be at the customer's cost (depending on the deal they do with their retailer).

If the customer wants a *non-standard install*, that is if they want to go underground where we would normally want to go overhead (for example if their current Telstra cable is overhead) or if they would like the NTD on a wall that's in the middle of the house (rather than one that has an outside edge (remembering that the NTD is installed inside, but that's easier on an outer wall, if you know what I mean) then that is something that they need to discuss with their retailer and when we install it we will charge the retailer the difference between a standard install and the non-standard one requested and it's up to the retailer whether that cost gets passed on to the customer. In some cases retailers may absorb that, but I stress that only happens if the customer wants something that's not standard.

I should also stress than none of this happens unless a customer orders a service from us through their retailer. We aren't forcing people to connect (although it is true that under the Telstra deal, after a certain period of time after we've finished building in an area the copper network gets cut off).

Hope it helps. Let me know if you need more.

Mike

---

**From:** Nuttall, Graham (T. Windsor, MP) [<mailto:Graham.Nuttall@aph.gov.au>] **On Behalf Of** Windsor, Tony (MP)  
**Sent:** Wednesday, 29 June, 2011 11:34 AM  
**To:** Mike Kaiser  
**Subject:** FW: QUESTION ON THE NBN

Can you shed some light on this please Mike

Penshurst is not in the New England but with Tony as the Member for Austraya we get 'em all ☺

Thanks

Graham

---

**From:** [redacted] [mailto:[redacted]]  
**Sent:** Wednesday, 29 June 2011 10:45 AM  
**To:** Windsor, Tony (MP)  
**Subject:** QUESTION ON THE NBN

Dear Mr. Windsor,

Because you support the roll out of the NBN, you may be able to help me in respect to some information that I have not been able to find.

In the Definitive Agreement recently announced, it states that the end user will bear the cost of connection to the NBN.

Can you advise me if I, as a pensioner, will be able to afford the cost of connecting to the NBN and what will be the proposed monthly charge?

If I can't afford to connect to the NBN is there an alternative for me?

Yours sincerely,

[redacted]

[redacted]

=====  
Email scanned by PC Tools - No viruses or spyware found.  
(Email Guard: 7.0.0.21, Virus/Spyware Database: 6.17810)  
<http://www.pctools.com>  
=====

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**From:** Nuttall, Graham (T. Windsor, MP) [Graham.Nuttall@aph.gov.au]  
**Sent:** Wednesday, June 29, 2011 1:56 PM  
**To:** Mike Kaiser  
**Subject:** RE: The Technical Limitations of a Wireless NBN - good one

Will try to find out and come back to you Mike

It came without any attribution of content

Cheers

Graham

-----Original Message-----

From: Mike Kaiser [<mailto:MikeKaiser@nbnc.com.au>]  
Sent: Wednesday, 29 June 2011 12:57 PM  
To: Nuttall, Graham (T. Windsor, MP)  
Subject: RE: The Technical Limitations of a Wireless NBN - good one

Thanks Graham, very helpful.

Can you tell me who put it together?

Mike

-----Original Message-----

From: Nuttall, Graham (T. Windsor, MP)  
[\[mailto:Graham.Nuttall@aph.gov.au\]](mailto:Graham.Nuttall@aph.gov.au)  
Sent: Wednesday, 29 June, 2011 11:00 AM  
To: Mike Kaiser  
Subject: The Technical Limitations of a Wireless NBN - good one

G'day Mike

Got this forwarded to us the other day and thought you may like to see it when you get a few minutes

Cheers

Graham

Graham Nuttall  
Office of Tony Windsor MP  
Independent Member for New England

Tamworth 02 6761 3080  
Canberra 02 6277 4722  
Mobile

## A Wireless NBN?

One question that keeps getting asked is whether fibre technology (Fibre to The Home or FTTH as it is known) is necessary for Australian National Broadband Network – why can't we move to an all-wireless NBN?

In particular many people see the innovation that has happened in wireless data over the past fifteen or so years, and ask the question "Wireless technology can do everything we want from broadband today, and as my needs grow won't new innovations mean wireless can deliver my needs in perpetuity?"

The answer to that question is fairly technical – this article tries to explain the situation without the reader requiring an advanced engineering degree. If you do have such a degree, please forgive the simplifications.

## What is the problem with wireless?

Wireless is a great technology that does things fibre cannot do; for instance provide you a broadband service when you are mobile or extend the reach where fibre is not economically, as is the case with connecting regional Australia to the NBN. However compared to fibre, current wireless technologies cannot provide anywhere near the bandwidth required when deployed in a real world situation.

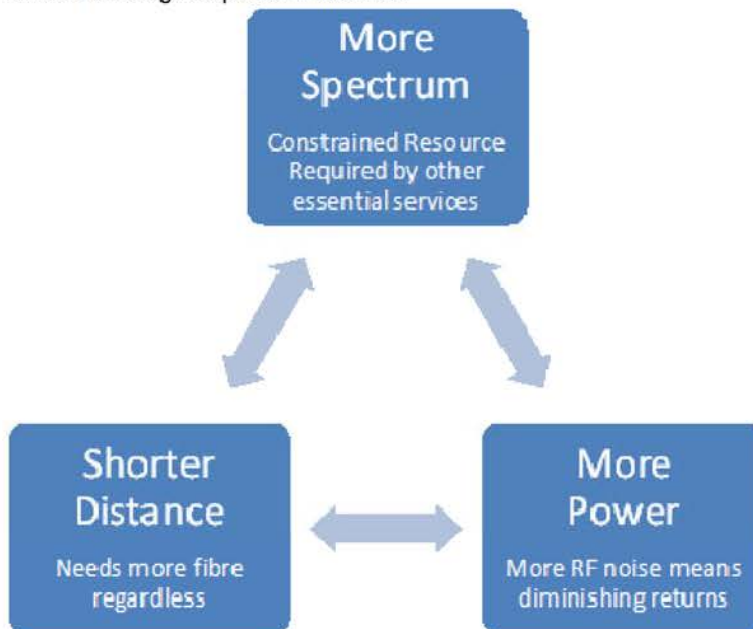
With today's 3G a transmitter can support more than 10Mbit/s (for instance Telstra current provides 42Mbit/s services) for a user but it is a shared bandwidth and if many users begin using these types of bandwidths for long periods, as opposed to short bursts, the service will grind to halt. Whilst 4G technology operates over four times the speed the same limitation applies.

And we can already foresee examples where this is required, for instance a single HD video stream consumes around 10Mbit/s of bandwidth **continuously**.

## OK but technology is always overcoming these limitations. Won't wireless innovation overcome these bottle necks?

This brings us to the crux of this article, which is that wireless capacity is **constrained by the laws of physics** and as Scotty always used to say on Star Trek, "You canna brrreak the laws o' physics captain".

From basic physics we know there are three possible approaches to getting wireless data higher speeds to the user:



Things like better encoding schemes, using reflected paths etc, can get us closer to the physical limits, but they cannot break through them! So let's examine the options.

## More Spectrum

This is the simplest answer; if you want to get more data throughput to the user, use more wireless spectrum. Unfortunately there are a couple of serious issues with this.

## Radio Spectrum is shared and needed for many things<sup>[i]</sup>

Radio Spectrum is used for TV and AM/FM broadcast radio, and emergency services, and ships at sea, and the military and HAM radio, etc. This means only certain slots are available for wireless broadband. To get more available bandwidth would require shuffling of these other services which takes money and time.

However even assuming we can restack the bandwidth there are even bigger problems

## Bandwidth is a limited resource

Theoretically bandwidth is available right up a massive 300GHz a second – so maybe one day we can use this for wireless broadband, right?

Unfortunately it is not practical to use these higher frequencies over any distance, even in a vacuum. This is where we hit our first law of physics Free Space Path Loss<sup>[ii]</sup>. Every time you double the frequency you need four times the power. And it gets even worse; at these super high frequencies atmospheric absorption becomes a problem.

In practice frequencies above 30GHz might be fine for Wifi, but they will not go the distance for an NBN network.

If by some magic the bandwidth stacking gets sorted out, and with new technology innovation we can utilize the whole of the radio spectrum up to 30GHz, displacing all other users, we still only get around 50 customers (at NBN speeds) per tower – a cellular tower in every street.

**By contrast optical fibres use optical spectrum available, which is over 100,000GHz<sup>[iii]</sup> 3000 times the entire capacity of the wireless spectrum. In any innovation race, fibre will always be capable of higher speeds than wireless.**

So we can see radio spectrum is limited and is not the answer.

## More Power



Claude Shannon whilst at Bell Labs, the innovation centre of today's Alcatel-Lucent, published the Shannon-Hartley theorem, otherwise known as Shannon's Law<sup>[iv]</sup>. This law tells us that by putting more power into a wireless channel you can get higher data rates out

Unfortunately to get higher data rates requires exponentially more power, and therefore creates a practical limitation to the data rates that can ever be achieved. This exponential relationship means that as the power applied goes up, the efficiency goes down resulting in diminishing returns.

The same sort of thing happens with cars – the new SS Veyron has 20% more power than the standard Veyron. However when a car is traveling at over 400km/h that 20% equates to only a 6% increase in top speed.

The reasons power limitations are important are not only that the energy required to run the system is a financial and ecological cost, but also because of the interference such power creates on other systems, EMF emissions and battery power.

## **Shorter Distance (Smaller Cell Size)**

Now we have finally come the solution that is not constrained by the laws of physics – a the longest distance between base station and a user defines an area known as a cell. And you can make a cell as small as you like.

If we assume we are using 4G technology and if we deliver the NBN target speed of 100Mbit/s per house, which means one cell per house. This means every house needs a base station and fibre backhaul.

This is exactly what WiFi does today – providing one or more wireless cells per house. And in order to deliver services to multiple high demand devices, like HD TV, they are connected back to the network via high speed fixed links which in future will be fibre to the home.

We will also see small cell base station which operates using the mobile standards in the home, called femto.

## **Wireless and Fibre are Complementary**

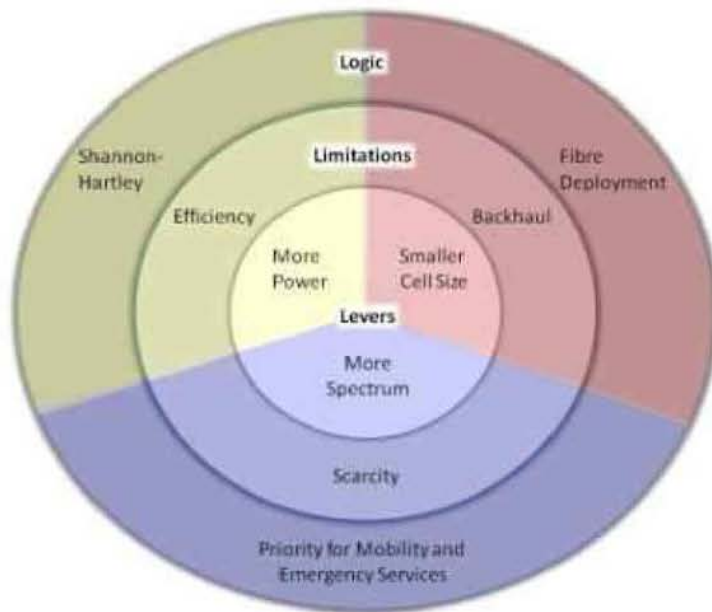
There are obvious times when a wireless network connection makes sense like when the user is mobile or when user density is low and the cost per site of fibre is exorbitant.

However in urban environments where you want to deliver high bandwidth services, fibre is necessary.

## **Conclusion**

**As you can see, when you want to provide high speed continuous services, you cannot engineer a conventional wireless network with sufficient, power, bandwidth or small enough cell size.**





And Next time someone tells you that they want a wireless NBN not fibre tell them this – the one thing a wireless NBN needs is fibre to the home.

And don't blame me, blame science.

## Notes

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### RF Spectrum usage:

See ACMA attachment accompanying.

### Free Space Path Loss:

$$\begin{aligned} \text{FSPL} &= \left( \frac{4\pi d}{\lambda} \right)^2 \\ &= \left( \frac{4\pi d f}{c} \right)^2 \end{aligned}$$

- f is the signal frequency (in hertz),
- d is the distance from the transmitter (in metres),
- c is the speed of light in a vacuum,  $2.99792458 \times 10^8$  metres per second.

> So losses increase with the square of the distance

### Shannon-Hartley Theorem:[V]

$$C = B \log_2 \left( 1 + \frac{S}{N} \right)$$

- C is the channel capacity in bits per second;
- B is the bandwidth of the channel in hertz (passband bandwidth in case of a modulated signal);
- S is the total received signal power over the bandwidth (in case of a modulated signal, often denoted C, i.e. modulated carrier), measured in watt or volt<sup>2</sup>;
- N is the total noise or interference power over the bandwidth, measured in watt or volt<sup>2</sup>; and
- S/N is the signal-to-noise ratio (SNR) or the carrier-to-noise ratio (CNR) of the communication signal to the Gaussian noise interference expressed as a linear power ratio (not as logarithmic decibels)

> As the power increases, the noise floor increases and channel efficiency reduces

---

[i] Radio Frequency Spectrum Allocation Chart, ACMA 2008

[http://www.acma.gov.au/webwr/radcomm/frequency\\_planning/spectrum\\_plan/arsp-wc.pdf](http://www.acma.gov.au/webwr/radcomm/frequency_planning/spectrum_plan/arsp-wc.pdf)

[ii] Free Space Path Loss, Wikipedia, [http://en.wikipedia.org/wiki/Free-space\\_path\\_loss](http://en.wikipedia.org/wiki/Free-space_path_loss)

[iii] Visible spectrum, Wikipedia, [http://en.wikipedia.org/wiki/Visible\\_spectrum](http://en.wikipedia.org/wiki/Visible_spectrum)

[iv] Shannon-Hartley Theorem, Wikipedia, [http://en.wikipedia.org/wiki/Shannon-Hartley\\_theorem](http://en.wikipedia.org/wiki/Shannon-Hartley_theorem)

[V] C. E. Shannon, "A mathematical theory of communication", *Bell Syst. Tech. J.*, vol. 27, pp. 379 - 423, 623-656, 1948.

# Australian radiofrequency spectrum allocations chart

The spectrum is a common natural resource and is allocated to various users with a view to ensuring that the spectrum is used in an efficient and effective manner.

The spectrum is divided into bands which are allocated to particular services with a view to ensuring that the spectrum is used in an efficient and effective manner.

The chart is a summary of the current spectrum allocations in Australia and is based on the International Telecommunication Union (ITU) Radio Regulations.

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The ITU Radio Regulations are the basis for the spectrum allocations in Australia.

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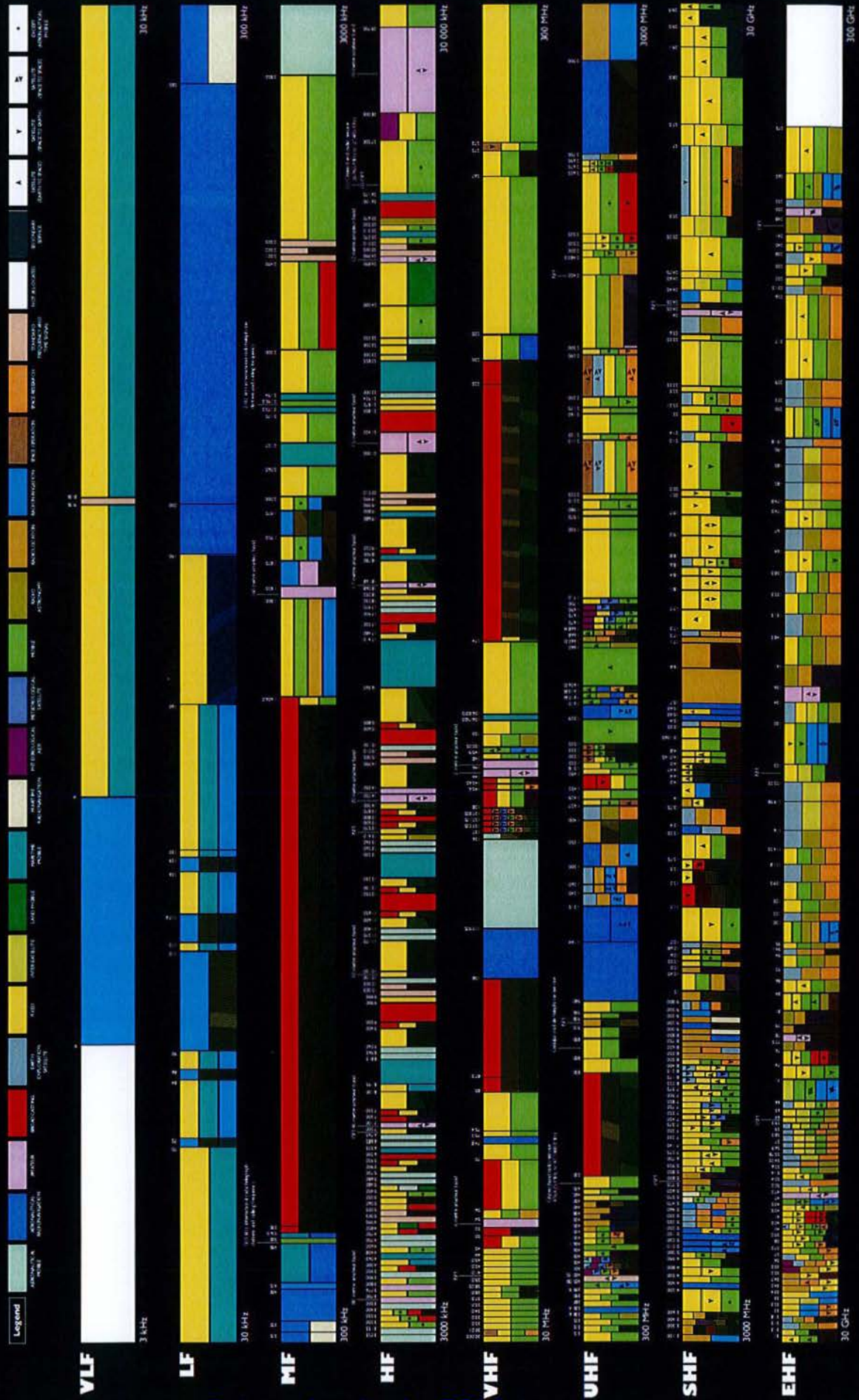
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**Australian Government**  
**Australian Communications and Media Authority**  
 External Communications Activity 208



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**From:** Mike Kaiser  
**Sent:** Thursday, February 10, 2011 4:45 PM  
**To:** Tucker, Peter (A. Wilkie, MP)  
**Subject:** RE: Briefing for Mr Wilkie

Peter, I'm locked in for 29<sup>th</sup> March. Where?

Mike Kaiser

---

**From:** Tucker, Peter (A. Wilkie, MP) [<mailto:Peter.Tucker@aph.gov.au>]  
**Sent:** Wednesday, 2 February, 2011 4:53 PM  
**To:** Mike Kaiser  
**Subject:** RE: Briefing for Mr Wilkie

Mike. Just realised 14 March is a public holiday. The afternoon of Tues 29 March, 3.00pm appears to be the next opportunity. The diary fills quickly, so if you could confirm the date and time at this stage, I would be grateful.

***Peter Tucker***

Chief of Staff  
Mr Andrew Wilkie MP  
Independent Member for Denison  
188 Collins Street  
HOBART TAS 7000

---

**From:** Mike Kaiser [<mailto:MikeKaiser@nbnco.com.au>]  
**Sent:** Thursday, 27 January 2011 1:43 PM  
**To:** Tucker, Peter (A. Wilkie, MP)  
**Cc:** Trent Williams; Darian Stirzaker  
**Subject:** RE: Briefing for Mr Wilkie

Peter,

Sorry, I should have responded much sooner. 14 March would be good for me. I'll see you there and we can arrange details closer to the date.

Regards

Mike Kaiser

---

**From:** Tucker, Peter (A. Wilkie, MP) [<mailto:Peter.Tucker@aph.gov.au>]  
**Sent:** Wednesday, 19 January, 2011 4:15 PM  
**To:** Mike Kaiser  
**Subject:** RE: Briefing for Mr Wilkie

Thanks for this, Mike, and please thank John for making the call.

The briefing I have in mind is for Andrew and staff. We are reasonably across the NBN in terms of the national roll-out and policy, as we have sat through the briefings with Conray and his office.

But we would like to see the installation and roll-out in the field and learn more about how the NBN will make life better for the consumer in Tasmania. And also when suburbs in Denison will come on-line. So, I'm thinking, that would mean 30 mins in the office going over the Tas activities and then a field component, I guess at Sorell?, to see how the fibre is laid and connected. Time would be Monday 14 March, if possible.

**Peter Tucker**

Chief of Staff

Mr Andrew Wilkie MP

Independent Member for Denison

188 Collins Street

HOBART TAS 7000



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**From:** Mike Kaiser [<mailto:MikeKaiser@nbnco.com.au>]

**Sent:** Tuesday, 18 January 2011 8:49 PM

**To:** Tucker, Peter (A. Wilkie, MP)

**Subject:** Briefing for Mr Wilkie

Hi Peter,

I'm aware through John McLean that Mr Wilkie would like to be specifically briefed some time on NBN Co's activities and plans in Tasmania.

I'd be happy to put that together for him and travel to brief him in either Hobart or Canberra.

What is your time-frame on that?

Regards

Mike Kaiser

**Principal – Government Relations and External Affairs**

P: 02 9926 1994

E: [mikaiser@nbnco.com.au](mailto:mikaiser@nbnco.com.au)

Level 11, 100 Arthur Street

North Sydney NSW 2060



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**From:** Mike Kaiser  
**Sent:** Thursday, April 14, 2011 5:53 PM  
**To:** Tucker, Peter (A. Wilkie, MP); Lalla Hinds  
**Cc:** [redacted] Wilkie, MP); Trent Williams; Lalla Hinds; Peta Fitzgerald; Darian Storzaker  
**Subject:** RE: Briefing for Wilkie Office

Hi Peter,

I'm pleased you've met Lalla. She's a great advocate for the NBN and a passionate Tasmanian!

I'm very conscious that we haven't caught up. If it's a briefing for staff you need I can arrange for our GM External Affairs, Trent Williams to conduct that, possibly along with Darian Storzaker our GM State Operations (Tas). I will ask Trent to call [redacted] and sort out a time.

Peta Fitzgerald will also send to you links to our Information Kit and a full suite of case studies/ fact sheets which covers just about every topic an electorate officer might be asked. I will ask her to post you a hard copy also.

Incidentally, we are now featuring a number of Tasmanian Case studies on our youtube channel which can be accessed at [www.youtube.com/nbnco](http://www.youtube.com/nbnco)

If there's anything else we can do for you, let me know.

Mike Kaiser  
[redacted]

---

**From:** Tucker, Peter (A. Wilkie, MP) [<mailto:Peter.Tucker@aph.gov.au>]  
**Sent:** Thursday, 14 April, 2011 5:10 PM  
**To:** Mike Kaiser; Lalla Hinds  
**Cc:** [redacted] (A. Wilkie, MP)  
**Subject:** Briefing for Wilkie Office

Hello Mike and Lalla

I met Lalla today at the Rotary lunch, which was a great pleasure. Mike, I notice that our briefing session has not happened, I think because of shifting schedules from both our offices.

The reason behind the original request was for an on-the-ground briefing for staff. Andrew and I understand the basics behind the technical argument; what we really need is a Hobart-based brief on the Tassie roll-out and perhaps a site visit for all the staff to see the cable being laid, see a household installation, see the exchanges (or whatever they call them) etc. We get asked a lot on this type of thing and to be frank I don't think NBN/government has explained the logistics particularly well to date. Just to put things in a little context, you may be aware that a constituent [redacted]

[redacted] has been critical of the department's education efforts to date - I think with some justification. [redacted]

[redacted] I don't intend to get involved in pushing [redacted] claims further, other to point out that there is a high level of ignorance surrounding the NBN - including in this office - and it really needs to be explained in every-day language that we can understand. That is the purpose of the briefing we would like.

So can we still make that happen?

If so can you contact  on 03 6234 5255 to arrange a time.

Thanks, and look forward to catching up.

***Peter Tucker***

Chief of Staff

Mr Andrew Wilkie MP

Independent Member for Denison

188 Collins Street

HOBART TAS 7000

email: [peter.tucker@aph.gov.au](mailto:peter.tucker@aph.gov.au)

Web: [www.andrewwilkie.org](http://www.andrewwilkie.org)

Hobart Office: 03 6234 5255

Canberra Office: 02 6277 4766 (Sitting weeks only)

Mobile:

---

**From:** Mike Kaiser  
**Sent:** Monday, May 09, 2011 3:36 PM  
**To:** Merope-Synge, Django (A. Wilkie, MP)  
**Subject:** RE: Briefing

Absolutely. Feel free to contact me on any matter.

Mike Kaiser

---

**From:** Merope-Synge, Django (A. Wilkie, MP) [<mailto:Django.Merope-Synge@aph.gov.au>]  
**Sent:** Monday, 9 May, 2011 3:31 PM  
**To:** Mike Kaiser  
**Subject:** RE: Briefing

Dear Mike

Thanks for following up this briefing. It was very informative - we got some long standing questions regarding the NBN answered and feel much better equipped to answer the inevitable questions which will come into this office once construction begins in the electorate.

While I understand that Trent and the staff of NBN Co in Tas are the best place to forward specific concerns, if we have some policy/implementation questions, should we direct them at you?

Regards

**Django Merope-Synge**

**Office of Andrew Wilkie MP**

**Independent Member for Denison**

HOBART  (03) 6234 5255 188 Collins St Hobart 7000 |  GPO Box 32 Hobart 7001

CANBERRA  (02) 6277 4766

MOBILE  Email:  [django.merope-synge@aph.gov.au](mailto:django.merope-synge@aph.gov.au)

---

**From:** Mike Kaiser [<mailto:MikeKaiser@nbnco.com.au>]

**Sent:** Monday, 9 May 2011 3:08 PM

**To:** Tucker, Peter (A. Wilkie, MP)

**Cc:**  (A. Wilkie, MP)

**Subject:** Briefing

Hi Peter,

I understand Trent Williams briefed your staff in Tasmania recently. Was that satisfactory? Is there anything further you or the Mr Wilkie require of us?

Particularly as more construction work is about to commence in Tas, please don't hesitate to refer constituent inquiries to us for further information back to you, or a direct answer from us as appropriate.

Regards

Mike Kaiser

**Principal – Government Relations and External Affairs**

P: 02 9926 1994



E: [mikekaiser@nbnco.com.au](mailto:mikekaiser@nbnco.com.au)

Level 11, 100 Arthur Street

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