

NBN Parliamentary Enquiry Submission. Stephen Turner. Coonabarabran Business Centre and Computer Hospital. March 29, 2018.

I will address the points of enquiry as below:

a. planning, mapping and eligibility for satellite, fixed wireless and fixed line services;

-- How was planning decided?

-- There are many towns across the country where the layout of the multiple technologies is done with no logic or clarity. Many towns seem not to have been consulted at all.

-- Coonabarabran, in central western NSW, where I live and where my business is located, has been provided with very average capacity. The town's borders have been very narrowly defined. The areas where the town can expand have been left off the rollout entirely and our industrial area has been ignored as well, which will do nothing but harm for any effort we have to attract new business. Why have our town borders been so randomly defined and done without any regard for the town itself and any possible growth in the future? Or even the present -- how can our industrial area be left off fixed line Internet when there are more businesses there than on the main street?

-- Satellite is not a valid option when you are talking about housing areas that are within the town. How can a town position itself against other areas when they are being defined as isolated and remote by the NBN, when other parts of the town are being given the (comparatively) better FTTN technology.

-- Satellite is also not a valid option when you are talking about housing areas currently covered by ADSL. Satellite is a step down from ADSL in terms of data limits, latency and overall cost (basic speed is the only place it improves). Satellite is far worse value for money than any other kind of Internet service and it should only ever have been reserved for the truly remote. Not for areas within or very near to towns that already receive fixed line services.

-- Have preferences based on a town's future "viability" been made, without public consultation or thought? What appears to have happened is that certain towns in certain areas have been declared "not for the future" and are being left out of this nation-building project entirely, or being given seriously limited service.

-- The whole NBN rollout has been based on a "one size fits the whole country" model which gives no regard to regional geography and layouts. There has never been any consideration for local variations or the expertise that local knowledge could bring to make this project work better in different areas.

b. adequacy of plans and service reliability of satellite, fixed wireless and fixed line services;

-- Fixed line services will always be the most stable and reliable NBN. Fibre would have been the best and most stable service for now and the future, but even existing fixed line-based services will be more reliable than wireless technologies. Then, in the field of wireless, terrestrial wireless will always be better than satellite, especially if it is fed by fibre backhaul (the key deficiency of much fixed wireless is when it also relies on wireless backhaul rather than fibre).

-- Of course, fixed line relying largely on dated and often damaged copper cabling has no value in the future, and has created an NBN that will be current for the equivalent of five minutes. While countries like New Zealand are powering into the future with largely fibre rollouts, we have spent billions of dollars on a network that will be largely useless in just a few short years.

A stark reminder of how inequitable the NBN is between urban and regional services:

A quality NBN fixed line plan in a city or even country town centre:

-- \$99.95 a month for 100/40 FTTN NBN with unlimited data, no shaping and a latency of 20-40ms.

That is a plan from Internode (that I personally have living in a country town). I do not use a home phone line service but could add a VOIP service for \$20 per month. My family uses an average of 600GB per month data download and up to 1TB in holiday times.

-- \$150 a month for a satellite service of 25/5 connection speed with 150GB peak data and 150GB "off peak" data, with a latency of 600-700ms. In practice few users can make use of much of the off-peak data -- it is there to pad the plans. A VOIP service is possible but most satellite users will use a home phone line service that is \$30-\$50 per month.

This is one of the best Skymuster plans available, from Harbour ISP. This is what friends of mine have to use living as little as 3-5km away from me.

How are those two situations equitable? We make arguments that satellite service in truly remote and inaccessible areas are an improvement over previous services, and in some cases they are, but when people on town fringes (or in documented cases on capital city fringes) are told to use satellite as their only option, they are immediately put in a thoroughly inequitable situation compared to their friends and neighbours.

Why has this been deemed acceptable? The only argument appears that doing anything else is too hard, that in order to meet an artificial deadline we should just shove people on the easiest option to get them on something quickly.

c. issues in relation to the future capacity of satellite, fixed wireless and fixed line services;

-- Satellite cannot be fit for the future. It is already constrained by limitations of speed and data bandwidth both for users and the overall service. The best solution for satellite is for it to be kept for only the truly most remote people who will never in any real situation have any

better option (ie: the last 3% -- the original people the NBN was planning to have on satellite only). Certainly not people on the fringes of towns or even capital cities.

-- Fixed line as FTTN is a poor choice for the future as well, relying on already decades-old copper cabling for a supposedly "future" service? Rural areas area already particularly poorly-served by FTTN because the cabling is more likely to be older and more likely to have been serviced or replaced less by major carriers.

-- Fixed wireless can be a good choice for the longer term, especially in rural areas, but not without fibre backhaul. Already, the limitations of wireless backhaul to many fixed wireless towers is showing in terms of congestion and poor service in certain areas. Fixed wireless, properly planned, can provide better service for geographically dispersed areas in regional Australia that should have more than just satellite.

d. provision of service by alternative providers of satellite, fixed wireless and fixed line services

-- The poor state of the NBN in much of Australia has at least given an opportunity for private ISPs to thrive. Ranging from large operations such as Uniti Wireless in urban areas that have suffered delayed rollouts or poor business services, to smaller operations in country areas supporting local regions in need of better service.

There are two points that need to be addressed for small alternative ISPs:

-- Regional backhaul is in an atrocious and unaffordable state. Most regional areas still only have Telstra-provided cable available as backhaul that is prohibitively expensive and hard to access.

Proposal: If small regional ISPs could access NBN backhaul infrastructure they could provide better alternative service at a lower overall cost. Either that or access to backbone

fibre such as the Vocus network should be mandated across regional Australia, not just from specific regional areas.

-- NBN satellite services are currently subsidised to the tune of \$7000 per customer. Independent regional ISPs could successfully connect customers and provide their access for a tenth of this price. If there was some kind of combination of resources this would benefit both the government, that would be able to point to better connections and services for regional areas, and service providers that would be able to provide more employment in regional areas, and there would be a more efficient use of available funds.

Instead, we have a situation of absurdity and stubbornness where the NBN plows ahead with dated and inefficient technologies that cost too much provide no future scope and provide poor quality connections now that are unfairly overpriced for regional areas. The NBN takes its absurdly narrow mandate and does exactly what it is told, rather than actually providing the best solution for Australia.

e. any other related matters.

The above points have addressed everything I need to say.

Additional information following:

Article published online in late 2016 and read by large numbers in our local area. Available online here:

<http://coonacomputerhospital.com.au/2016/11/27/coonabarabran-nbn-rollout-to-create-huge-problem-for-town/>

Coonabarabran NBN rollout to create huge problem for town

by [Steve Turner](#) | 27 Nov, 2016 | [Computer help & tips](#), [Town news](#) | [3 comments](#)



Coonabarabran has a problem that is going to have to be dealt with. Many of you in town will have noticed the NBN rollout here in the last month. The green boxes going up around town (10 of them by our count) and the various line work going on as well.

But there is a problem that is going to affect us all. It's going to affect future growth for the town and future possibilities. Despite past assurances and efforts by council, it would appear that large parts of the town have been missed in the rollout. If you check the coverage maps on the NBN or Telstra sites, the rollout here has been mapped and the entire industrial area has been missed. Hilton Place has been missed. Everything on the other side of the hill west of town has been missed (think Rifle Range Road, Koala Place and many homes on Timor Rad that currently have ADSL). This is in addition to areas we already knew were going to be missed — Dandry Road, the new homes around the Newell Highway junction, further out on Timor Road.

Maps are added to the post below but you need to [use the Telstra rollout map as the best advice](#) — it lets you zoom in and check different areas around town. What the NBN has done is provide exactly enough to fit the current core boundaries of the town and nothing more. But the industrial area — who will want to move a business to an area so close to town that demands they get satellite Internet only? What about new housing expansion? None of the new areas of town where homes are being built will be told they have access to anything except satellite Internet. For homes minutes

from town that is absurd. And if you live in Hilton Place — which is in town! — satellite for you too in the future NBN model.

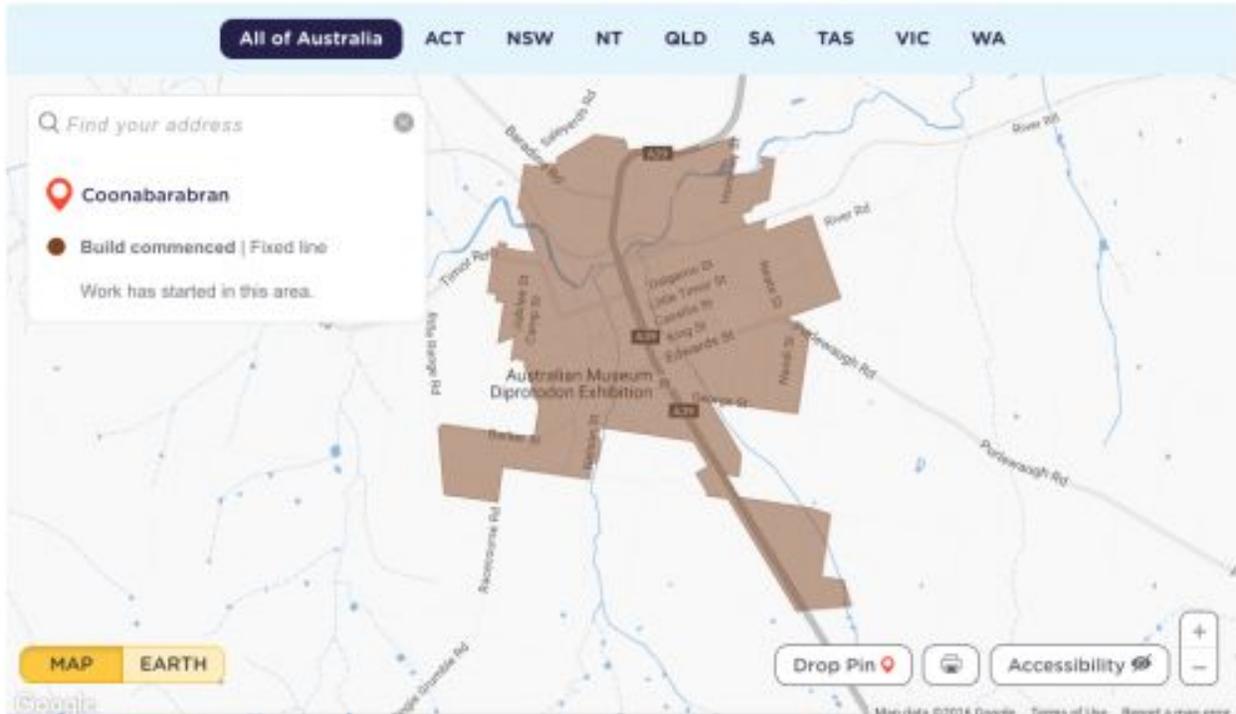
We have to do something about this. NBN has basically said our town is dying and we don't deserve anything beyond the most meagre of town boundaries. Who is going to move to a town where their fast Internet options are so badly curtailed? What business will want to use an industrial area where their only NBN option is satellite? (For that matter, what is the new Rural Fire Centre going to use for network connectivity?) In 2012 we were told there would be a fixed wireless tower here and that would have helped a lot, but that was removed quickly from plans in 2013 (something we've found many people in town still don't know). And while we have spoken before about our wireless Internet business plans, there are still technical issues with that plan to overcome but the situation now is worse than we imagined. We of course plan to pursue that more rigorously now.

What happens next is also hard to know for sure. NBN planners say that in 12-18 months after fixed line services come online in an area the ADSL service is turned off, BUT copper services stay active for satellite-only customers. When the Coonabarabran exchange serves this whole area and some have NBN fixed line but others don't, we honestly don't know what will happen. Usually ADSL is switched off because the NBN service is replacing it, and that is probably what will happen here (leading to large parts of the town and many businesses being forced to use either satellite or costly and inefficient 3/4G wireless) but in this strange case we really don't know for certain.

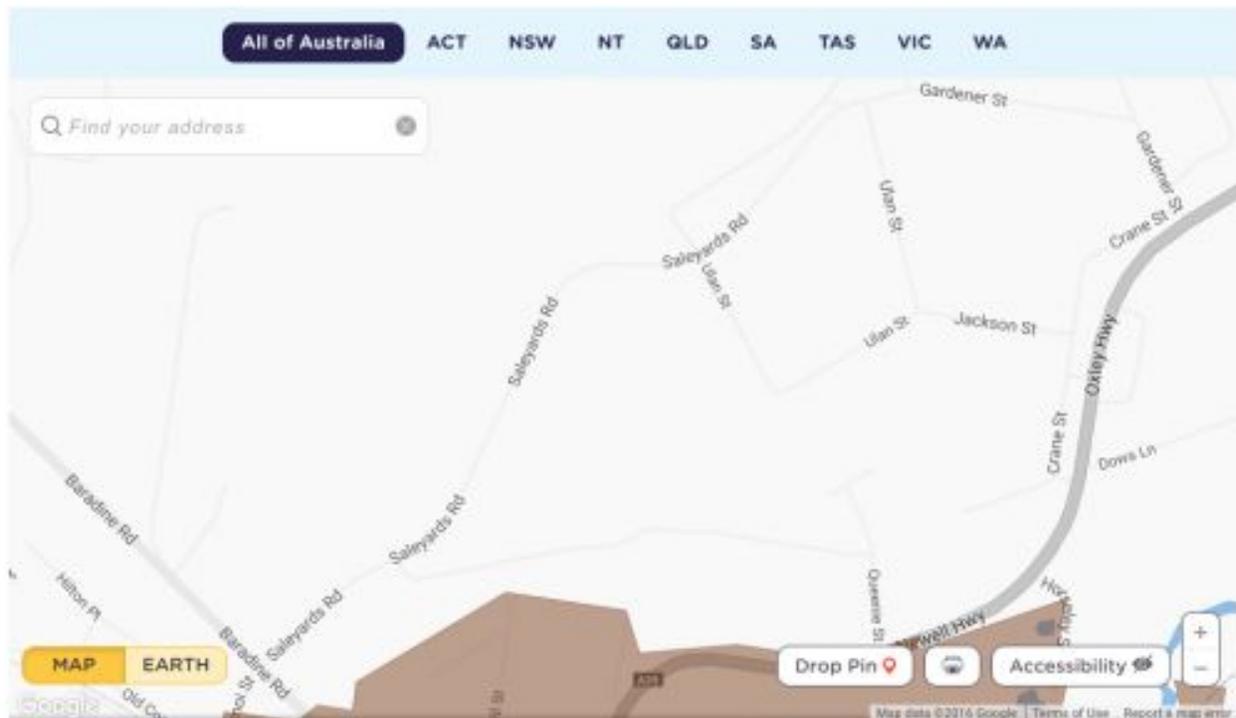
We will be presenting this information to council at the Coonabarabran town meeting on Tuesday night ([29 November](#)), in an effort to raise the issue further and see what can be done. At the council town meeting in March I was specifically told that the industrial area and Hilton Place were going to be included in the rollout after council intervention, but all available information now tells us this was not correct. I do not blame council for this — NBNco has displayed very little transparency in most of its dealings.

The government does not care about this in the slightest — they have decided the NBN satellite is as good as anything else on offer (something all evidence shows is not true). NBN satellite keeps you with low download limits (70-80GB per month maximum in peak times—an amount we can use on ADSL in 3 days!) and charges upwards of 50% more for that limitation than fixed line or fixed wireless Internet. Satellite should be for truly remote country properties, not for homes and businesses near or even in towns!

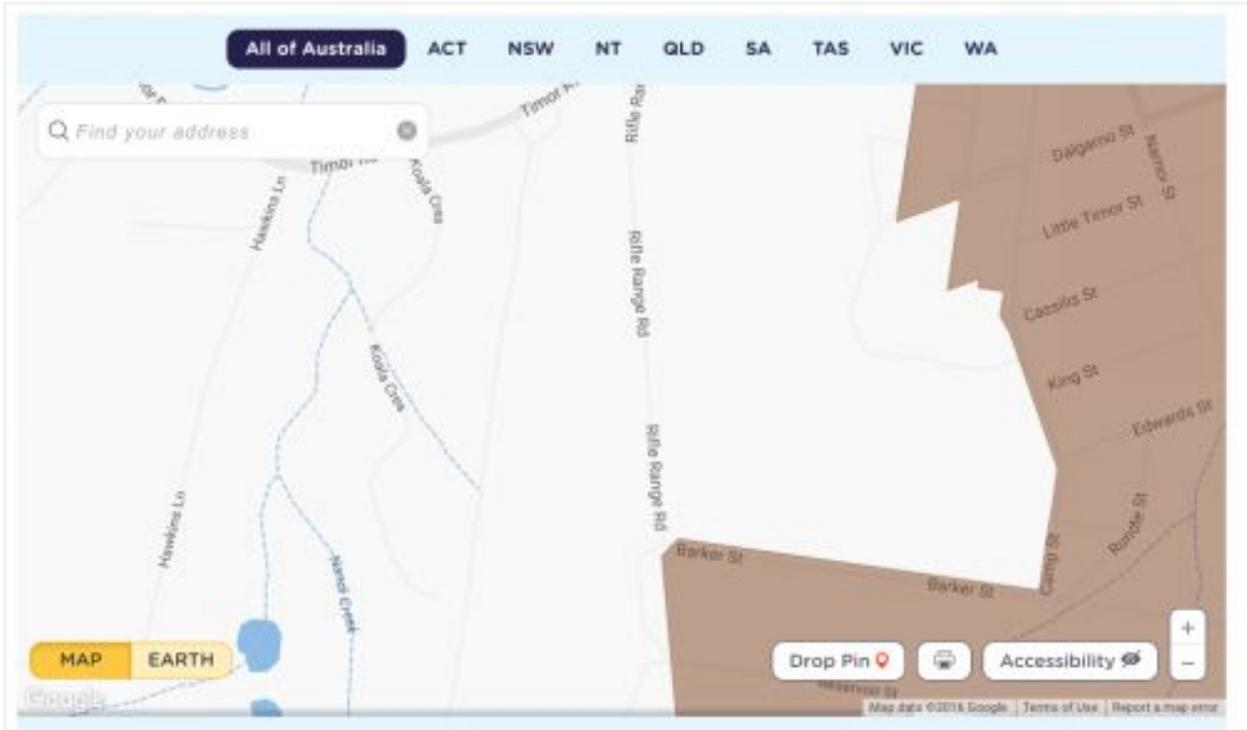
So we urge everyone affected by this directly and everyone who just wants a better deal for Coonabarabran now and in the future to make some noise about this. Come to the council meeting on Tuesday, talk to your friends and neighbours, take it further. One way or another we will improve the services in this town.



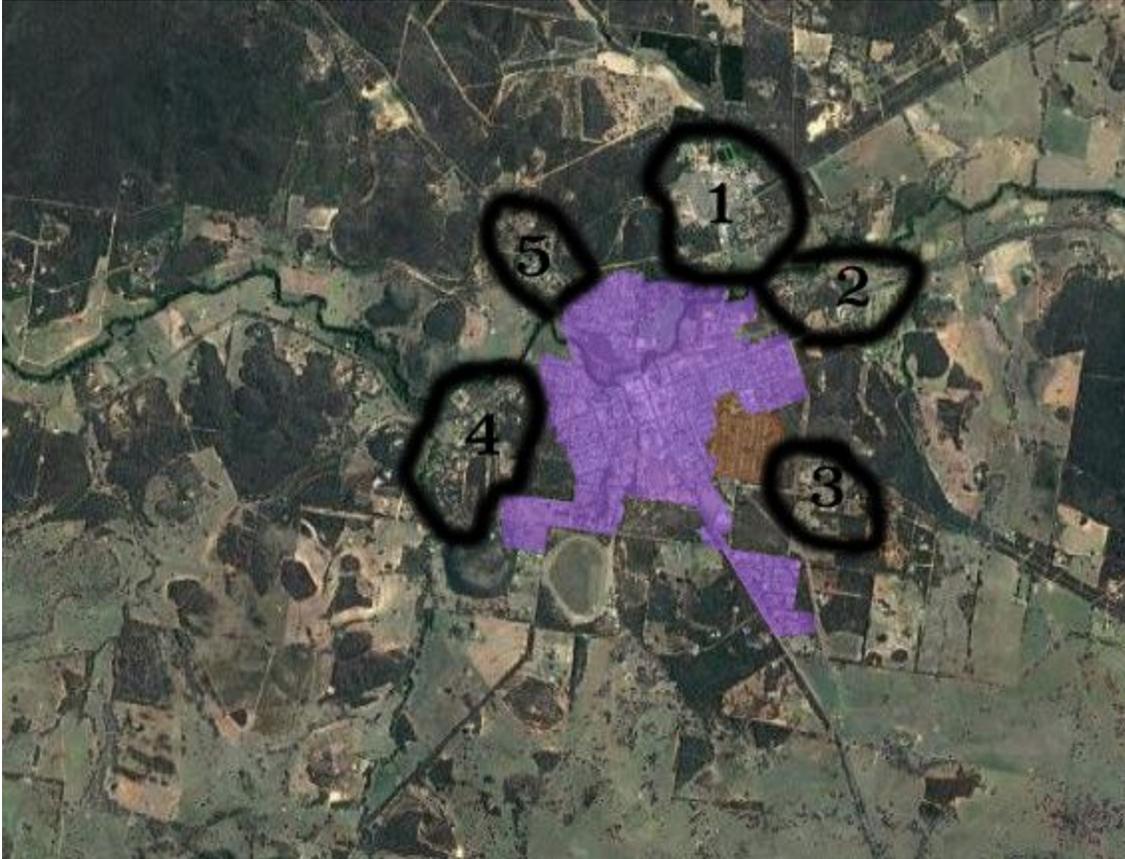
Our rollout according to Telstra. The industrial area and others are clearly left out. Click on the link above to zoom in closer.



Close view of the area north of town. You can see what is left out.



Close view of the area west of town. You can see clearly what is being left out.



A satellite view of Coonabarabran with the area covered by FTTN in purple (the area in brown is an area supposed to be covered but still inexplicably not ready, with no explanation provided by NBN despite many questions).

The circled and numbered areas are areas officially part of the town that have been left out of the rollout and put on satellite NBN only -- area 1 is particularly problematic as it is the industrial area where most of the businesses in town are located.

Areas 2,3,4,5 are residential areas, but provide most of the growth opportunities for the town.

This mismatch of town boundaries to NBN rollout is not uncommon -- other towns will have their own stories to tell but NBN bureaucrats seem to have drawn borders almost randomly, taking anything out of the ordinary or even remotely complicated as simply "too hard" and ignored the wishes of towns through little to no feedback or consultancy.