

David Jericho

DG & LC Jericho

Monday 14th June 2015

Regional Telecommunications Independent Review Committee

PO Box 2154
Canberra ACT 2601

Dear Committee members,

Thank you for the opportunity to contribute to this review.

Location:

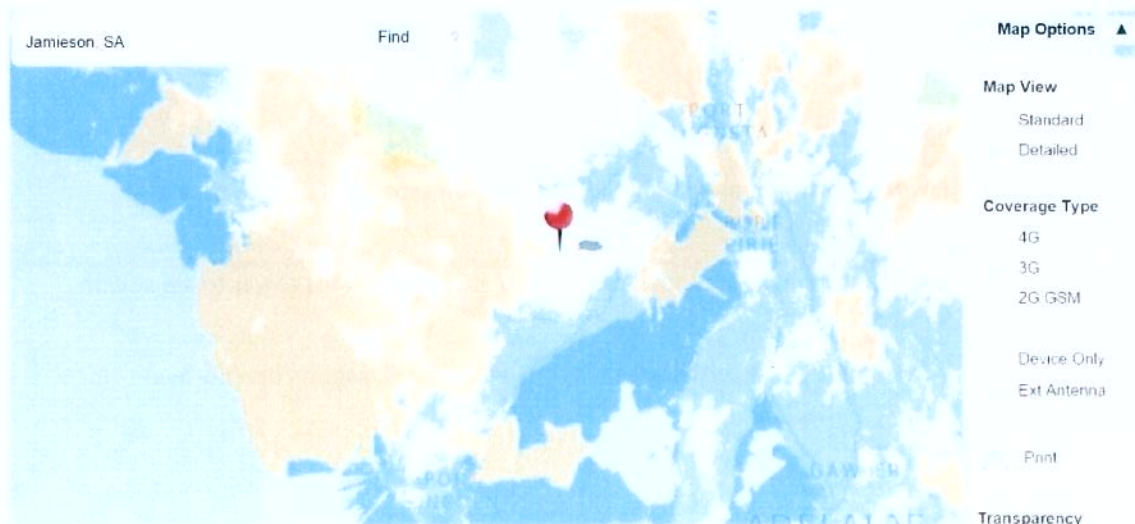
I own and manage a farming and contracting business at South
Australia. This is a position east of the road that joins the towns of Kimba and Cleve on the Eyre
Peninsula on the western side of South Australia.

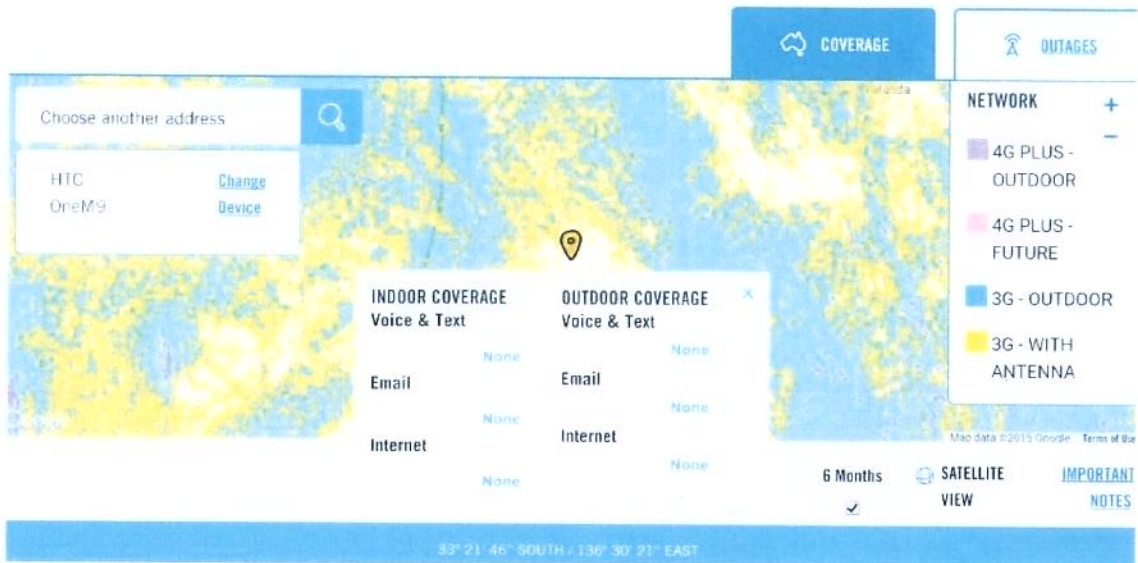
My farmed properties are as far from one another as 56 kilometres. My harvest contracting often
takes me as much as 100 kilometres from my farm base.

My motivation for contributing:

My farming operations base is located in a technology black hole. Mobile phone coverage is
available on about 20% of my farm property. Wireless internet coverage and speed is abysmal. My
business is situated approximately 15 kilometres from my nearest telephone exchange and so ADSL
is not available to me.

Please view the coverage maps from Telstra and Optus, and an internet speed test below:





testmy.net
Internet Speed Test

Home | Forum | Download Test | Upload Test | Auto Test | Database | Extras | Results

Welcome | Community | Test download speed | Test upload speed | Repeat Testing | Research Speed | Miscellaneous | My Results

How to Fix Slow Computer

Slow Computer Fix - 2 minutes Makes your PC Really Fast

My Download Speed Test Result | Test My Speed | My Speed :: 450 Kbps | 2012/11/25 11:11

★★★★ **Download :: 450 Kbps**

My Speed :: 450 Kbps

96% slower than my host average

90% slower than the AU average

99% slower than Index Speed

My attempts at improvement:

I currently operate with 2 Telstra approved Cell-Fi repeaters on separate farms to provide a reasonable coverage in my workshops and yard.

I use a Yaggi directional antenna pointed toward my nearest Telstra mobile tower to assist with mobile/wireless internet.

Where coverage is this poor even external antennas on vehicles and tractors don't provide much improvement.

How does this affect the way we work?

Our business is no different from any other business today in its reliance on technology. We need timely weather indicators, and timely market information. We source a lot of agronomic advice and information online, and because of a level of social isolation we appreciate being able to use the internet and mobile phones just to keep in touch.

Our business has some millions of dollars in machinery assets. Today's new machinery has technology built into it that allows us not only to drive guided by GPS signal but also to communicate with each other, with our dealer, and with a home base. It allows us to vary (according to pre-prepared maps) rates of seed, fertiliser and chemicals applied as we work. It allows us to monitor the varying yields in our paddocks, and even the green index of our crops.

For us, these are tools of trade. Sadly much of this technology REQUIRES (capitalisation intended) a mobile phone service.

An example: Currently I have a seeding machine working 56 kilometres away. I have prepared or made changes to a Variable Rate map for paddocks on that farm. I have two options to keep that machine doing what I want it to do – drive 56 kilometres and physically plug the new information into it with a thumb drive, or send the file via the internet through the mobile phone system. Which would you prefer? How do we stay progressive and competitive without good technology?

A social example: Available workers are now choosing jobs where they can live and work with access to NBN provided download speeds. My workers, at times will get off the tractors, drive 2 kilometres, just to let their wives know they will be working late. One trades online, and will often need to do the same to place an order or close out a trade.

Without better technology how will I keep workers?

So let's answer some of the posed questions:

Q1. Do people in regional Australia believe their reliance on telecommunications differs from those in urban areas? How does it differ and can you provide examples?

I'm not sure it differs, but I've always argued that it bridges the gap of isolation and now I want to use it to enhance my business.

When I began farming I would drive 6 kilometres to my neighbour's house to make a phone call by landline. The person in town or city could go next door or to a public phone box.

Consider the trauma and time to get help in a road or farm accident today if mobile coverage is non-existent.

My son, a consulting engineer in Adelaide, "could" work from here in the country, but can't because broadband is limited.

Q3. Having regard to the technical solution likely to be used in your area, do you have views on the adequacy of that solution in terms of meeting needs now and into the future?

Yes, NBN Satellite will be our provided service. While I welcome that, I'm disappointed that we in rural areas always seem to miss out on premium services (or speeds) based on sparseness of population. "We can't build a business case for that" is always the argument.

Words from the issues paper -

Satellite will provide service in all other areas. The capacity of nbn's new satellites will be much greater than those currently in operation but satellite is a finite and shared resource that needs to be rationed or prioritised. Latency is also inevitable with satellite performance, creating issues for real-time interactive uses.

Q5. For users living in areas without mobile coverage, what priorities, other than specific locations, do you consider should be recognised in future efforts to improve coverage?

Three things could be improved:

- i. Find ways to share infrastructure – electricity, backhaul, towers. The duplication is ridiculous.
- ii. Mobile cells, and the technology which is used, needs to service as much of the community as possible. An example: My local Telstra mobile tower at Caralue Bluff has a directional facility broadcasting along the Eyre Highway. I am informed it is not Omni directional and for this reason it does not provide service to me, although it quite visible from my premises.
- iii. Allow the development of repeater/booster technologies to improve signal and coverage if providers are unwilling to address the issues.

Q7. Do you have any views on co-investment approaches that might help to improve the broadband technology outcome in your area?

Yes. Some years ago I chaired a committee that built the case for 17 mobile cells on the Eyre Peninsula. Funding was provided by the Federal Government's Telecommunication Infrastructure Fund and the contract to install and operate was won by Telstra.

I'm sure Telstra would be pleased to improve coverage if someone either pays for it or co-invests. It is now difficult to build a business case to cover the few and isolated blackspot areas but for those people living in those areas the need for telecommunications technology is just as important as for those who currently have access to it.

My opinion is that provision of the co-investment needs to come from the commonwealth government under a universal service agreement that gives its citizens access to reasonable and upgradeable technology. I say upgradeable because our urban counterparts are seeing their mobile services upgraded from 3G to 4G and talk about 5G, whereas in my regional area 3G is the only available standard.

Q8. How might new applications and services that utilise mobile networks for voice and data transform the way you live and work?

I have highlighted, on Page 3, the issues facing the way we work (or rather the way we would like to work). I'd like to think I'm progressive in my farming operation but am unable to utilise the technology available to me because of poor mobile services.

I'd encourage committee members to follow this link and watch the short video which demonstrates better than my text words, the use of the technology I'm talking about. It's an American promotional video but the technology is available to me here and much is already built into new machinery: <https://youtu.be/PXxmbid9sgc>

Q9. What communications barriers have you experienced in expanding or operating your business or providing services, such as health or education? Have you been able to overcome these barriers and if so, how?

Without the use of Mobile Smart repeaters and directional antenna's my mobile service and even my wireless internet service is almost non-existent. I could barely hold a phone call without moving out of the shed (which is annoying when it's raining or windy) or running to an appropriate window in the house to get better coverage before installing the Cell-Fi Smart repeaters. My internet service is still very slow, but without the Yaggi directional antenna it was even worse.

We don't have an alternative to the Smart repeaters for vehicles or plant, so in blackspot areas we just go without any cover.

I find it annoying that ACCMA (Australian Telecommunications and Media Authority) bans any use of Mobile signal boosters, without allowing industry to develop technologies that would enhance coverage. I understand their reasoning but my attitude is, that if mobile cells are adversely affected by poor quality signal boosters then improve the technology of the repeaters, the cells, or add cells - but ultimately, provide better coverage.

Q10. What communication functions (for example, speed, mobility, reliability, data, etc) would best suit your needs, noting the limitations of each technology (for example, mobile, wireless, satellite, fibre)?

My request is for a mobile phone service in all areas of my workplace and a mobile form of access to the internet (probably through the same mobile phone technology).

- Satellite technology needs to be fixed and pointed, therefore will not address access from vehicles and tractors, harvesters etc.
- NBN satellite technology should go some distance to improving my internet access.
- Fibre is a dream but will not happen in my lifetime, but it also cannot be fixed to mobile equipment.
- I would like bandwidth or speed that will allow me to watch movies and video without the current impractical buffering that takes place.

Thank you for your consideration.

David Jericho