

## **2021 Regional Telecommunications Review**

**To the Regional Telecommunications Independent Review Committee (the Committee) :**

### **Introduction**

I reside with my wife in regional western Victoria on a 320 acre farm at [REDACTED], Mooralla, Victoria, 3314. Our children live in Queensland and I am semi-retired. I completed a PhD in medical chemistry in 1976 and undertook post-graduate training in pharmacokinetics soon after. I worked in a teaching hospital for 12 years and in various Australian and USA pharmaceutical and biotechnology companies for a further 17 years. I have been a consultant and expert witness to pharmaceutical and biotechnology companies for a further 17 years. I hold an honorary position at the University of Melbourne and continue to undertake some consultancy work and present an annual course of lectures at Melbourne University in my areas of expertise, clinical pharmacology and pharmaceutical sciences.

I hold the position of Secretary/Treasurer of the Victoria Lagoon Recreation Reserve Committee (VLRRC) of Management Incorporated and the associated Community Centre which is located at Mooralla approximately 2 Km from my house.

The views I express here are my personal views but I know from my eight years of experience on the VLRRC, that many of my views are shared by other members of the community.

### **Current Situation at our home in Mooralla**

Our house was built approximately 11 years ago on a site occupied by a previous farm house and is near a number of farm sheds, all in use by either our farm tenant or ourselves. We have owned the farm for 26 years. Our house is located on a small hill around 230 metres above sea level and is constructed of timber and colour-bond cladding and roofing.

There are three Telstra mobile phone towers in the area: one on East-West Road at Mooralla approximately 6.5 km away; another at Mt. Beptcha approximately 17 km away; and another at Mt Dundas approximately 20 km away. 4G transmission is only available to us from the Mooralla tower and yagi aerials installed on our roof now point to this tower. The Mooralla tower was installed approximately two years ago under the Black Spot program. This tower appears to have fairly lower power and although on a relatively high hill, transmission does not extend to many properties in the area.

Our telecommunication services comprise the following:

- Satellite NBN internet service operated by Activ8me providing download /upload speeds of 25/5 Mbs. Wifi access provided throughout the house using 2 Velop

- nodes. Activ8me cost: \$55 a month and one-off cost of about \$500 for the Velop nodes.
- Telstra mobile phone and broadband services accessed via one or more of three Yagi aerials on our house roof and stables roof. Our Telstra services are:
    - o Mobile phone 1 (my phone): 4G plan with 40Gb of data, unlimited calls and Telstra One service at \$60 a month;
    - o Mobile Phone 2 (wife's phone): 4G plan with 40Gb of data, unlimited calls and Telstra One service at \$60 a month;
    - o Both Telstra mobile services are accessed using a Telstra Smart Antenna connected to an external Yagi aerial. One-off cost about \$1200.
    - o Telstra Mobile Broadband service using a Night Hawk modem attached to an external Yagi aerial and broadcast around the house using two Telstra WiFi nodes: 75Gb of data a month at speeds of approximately 40/20 Mbs down/up: Cost: \$55 a month and one-off cost of about \$1000.
    - o Both of cars are equipped with Telstra Go Antennas to enable phone calls and internet on regional roads. Upfront cost: approximately \$1000 each.
    - o There is an additional Yagi aerial installed on the roof of the stables which have been refurbished to include two bedrooms for guests. The above-mentioned Night Hawk modem can be moved to these rooms for use by guests.
  - I use an Apple Desktop computer, iPad, MacBook and iPhone for my work, banking, correspondence and internet searching, for all VLRRRC banking and correspondence, and for all banking for my 98 year old mother in law who resides in at her home in Horsham.
  - My wife uses an iPad and iPhone for all internet searching and communications.
  - Our goal has been to use telecommunications to reduce conventional mail, in-person banking services and invoice payment for both personal and work needs. This reduces travel and mailing costs and speeds up communications. It has also become essential during the COVID-19 pandemic particular during lockdowns and a recent requirement to self-isolate.
  - After some initial resistance, I have been able to convince the Mooralla Golf and Tennis clubs associated with the VLRRRC to use telecommunications for banking and correspondence rather than conventional cheques and letters.

## **Limitations of our current telecommunication Services at our property**

### Internet

Our area is not serviced by NBN cable and so the only possibilities for internet are NBN satellite and Telstra mobile broadband. We maintain both NBN satellite and Telstra mobile broadband for our internet because of the unreliability of these services. There have been times when the satellite service has been down for several days. The Telstra mobile broadband service has also had intermittent problems compounded by our need to have a Smart antenna for transmission inside the house. The positioning of this antenna requires carefully optimization to ensure its performance. These two services each require their own modem and WiFi nodes to transmit the signal throughout the house.

## Phone

Telstra mobile and fixed line are available for phone calls but because of intermittent problems with the line and to reduce costs we have disconnected our Telstra fixed line. The only direct mobile phone reception in the house, albeit weak and unreliable, is at windows facing the towers. As outlined above, we rely on yagi aerials and a Telstra Smart antenna for phone calls inside the house. Calls made outside the house are now possible over most high points of the property with the installation of the Telstra tower at Mooralla under the Black Spot program. Calls from our cars are also possible on the property and regional roads using the Telstra Go Antennas installed in each car. Without them calls, calls repeatedly drop out.

## Our concerns

Our extensive reliance on expensive signal enhancement devices for our telecommunications is of concern to us. We have needed to upgrade these devices periodically to accommodate changes from 3G to 4G as well as to accommodate the new technology. Despite all our efforts and expense we still have many times when calls drop out and internet fails. As we age we are concerned that our ability to maintain these services and ensure reliable telecommunications during emergencies will decline.

We note that over the 11 years we have lived at Mooralla we have experienced several bush and grass fires, one of which burnt out our back paddocks, storms which have blown roofs off our sheds and numerous power outages. Reliable and efficient telecommunications are essential for us during emergencies and unreliable service puts us at risk.

Another significant concern to us is the relatively slow speed of our internet services. The NBN satellite service is relatively slow and the high 'Ping' time presents difficulties with several internet sites such as our international Commsec trading account. The cost also limits our ability to stream live TV using internet and for this reason we do not subscribe to Netflix or the like. The Telstra 4G mobile broadband service is better but is still slow compared with city speeds and is relatively costly. We have no ability to bundle phone, high speed internet and TV at our location to reduce cost. This contrast with city dwellers where around \$100 a month provides unlimited internet at speeds in excess of 100 Mbs.

## Our neighbours

I consider myself moderately tech savvy but am concerned that many of our neighbouring farmers do not have the time and knowledge to set up telecommunication systems such as ours. I am aware of several that have had to stand on their verandas to make phone calls and experience frequent dropouts during calls. Many, like us, do not have telephone coverage when out in field on their farms due to the hilly terrain. Farmers in the area run significant businesses with large capital outlays and generate significant income for the nation but are poorly supported with the available telecommunication services.

Slow internet speeds are also a serious impediment to farming families with children at school, particularly during lockdowns when they are schooling at home.

The lack of a good telephone signal in and around the Mooralla Community centre is not adequate for maintaining communications while engaged in sport or during meetings of the

CFA and VLRRRC at the Centre. It was totally inadequate during the major bushfire of 2010/11 when the Centre was used as a base for the CFA and DELWP.

### **Conclusion**

Regional dwellers should have access to the same level of telecommunication services at the same cost as city dwellers.

### **Proposals**

1. Provide high speed fibre optic connections to all residences in the region.
2. Increase the power output from mobile phone towers in the area and upgrade all to 4G with future capacity for 5G.
3. While awaiting these services, subsidise and support regional subscribers to reduce their upfront and monthly plan costs to match that of city dwellers.

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