

2021 Regional Telecommunications Review
Submission from Healesville Community Bushfire Group

To Whom It May Concern:

Please find attached our submission for consideration in regards to the regional telecommunications review. This submission is being made on behalf of myself, Elly Hanrahan and members of the Healesville Community Bushfire Group.

Through our voluntary work in looking at the way our community can prepare for bushfires and other natural disasters, it has become very clear that communication is a vital key for all community members to successfully prepare for, adequately respond to, and later recover from, disasters of all shapes and forms.

The recent storm events that impacted large areas of Healesville, the Dandenongs, and many other areas of Victoria, highlighted the vulnerabilities many communities have when it comes to a robust communications network. The loss of all tele-communications over a large area and for a number of days had a devastating impact on the responses local communities could mount to assist themselves and other community members during the immediate aftermath of the storm. This was particularly significant as the local emergency services, both paid and volunteers, were overwhelmed by the magnitude and widespread distribution of damage.

This further raised alarm bells for all of us living in such a fire-prone area of the potential for a disastrous outcome should the same widespread communications outage occur during a bushfire.

We humbly implore that this review seriously considers the impact that the change to NBN, a communications system so heavily reliant on power to distribution towers, has had on the resilience and reliability of the communications networks. The removal of the "old" technology which allowed landline phones to continue to work without power services has seriously jeopardised the safety of whole community as well as the safety of those emergency personnel who respond to disasters.

For Healesville, another 130 FDI day is not an "if", but a "when". Statistically, our area will experience a Code Red fire danger day once every 10 years- this means we are overdue for our next Black Saturday recipe. Imagine a township which now has a less reliable connection to emergency services due to technology "upgrades" than it did during the black saturday bushfires. This is the reality of the 98% residents who were forced to transition to the NBN.

With all communications now reliant on some form of internet connection or mobile service, this means that we are all in grave danger. Please find below our responses to the questions provided in the 2021 Regional Telecommunications Review Issue Paper.

Yours sincerely

Carolynne Hart
Healesville Community Bushfire Group.

1. What telecommunications services are required in regional Australia to meet current and future needs? Are there any things regional communities and businesses need to do, but can't, on their existing services?

Currently businesses and customers frequently experience periods of poor or intermittent services, this causes EFT connections to drop out mid transaction, applications to fail, phone calls to drop out, intermittent availability of text messaging services. In general there are periods of time when communications services are so poor people and businesses give up on transactions; robbing business of income and opportunities.

Regional areas require a robust and resilient telecommunications service, one that is able to support business transactions and can also service the needs of emergency services. Communities must be able to reach out to emergency services when required, the increase in frequency of natural disasters and extreme weather events impacts many regional / peri urban areas. These events are expected to increase in intensity and frequency in the future as climate changes evolve.

2. What changes in demand, barriers or challenges need to be addressed when it comes to telecommunications services in regional, rural and remote Australia?

Living in an area with a vulnerable electricity network means our telecommunications services are always at risk. Internet connection is an essential service in 2021 and beyond. In Healesville, we still experience frequent black outs of varying durations. This means that if you are working or in a telehealth consultation, you lose your connection to a health professional, which can sometimes have incredibly long waiting periods, or your work. The telecommunications networks which we rely on need to suitably address the vulnerability of our electricity network and have sufficient backup plans when the main power grids inevitably fail.

The population of Healesville and surrounding areas is rapidly expanding, however our telecommunications services have not kept pace with this increased demand. In order to meet this demand, service providers must address three key areas:

- A. Providing sufficient bandwidth that ensures a reliable service
- B. expanding existing coverage to the region to reduce black spots; especially high traffic areas such as along most of Maroondah highway between Lilydale and Healesville, as well as many outer areas of these centres such as Badger Creek, Chum Creek and Myers Creek, just to name a few.
- C. Finding solutions to the vulnerability of the network during sustained power outages.

3. How have the Government's policies and programs affected telecommunications service outcomes in regional, rural and remote Australia? How can these be improved?

The rollout of NBN and the switch to VOiP technology has left all services vulnerable to being completely cut off from emergency services during power outages. This is common after extreme weather events, fires and flooding. This kind of vulnerability was not widely advertised or known during the roll out and a huge percentage of the population were caught unawares during the June 2021 storm blackout.

Our community group ran a listening post following the June 2021 storm event and the second most suggested item listed as a concern by those residents who responded was the need for backup power services for the communications network (attached).

Some kind of reliable backup option needs to be implemented which will ensure residents still have universal service to 000 at a bare minimum.

4. How do service reliability issues impact on regional communities and businesses? How do outages, including in natural disasters, impact on communities and businesses?

In the aftermath of the 2021 June storm event, Healesville was without power and communications for 6 full days. This is both dangerous and unacceptable. During the storm event there were residents with substantial damage to their homes who were unable to call emergency services for assistance and family members could not reach each other to check on their welfare. The lack of communications networks also meant that offers of and requests for assistance from members of the community via social media was not possible.

It's truly amazing that this did not lead to any deaths in the region, though there were certainly some close calls, including one elderly lady who was totally cut off and isolated in her home, with no power, no phones, no heating, no cooking and no water for three days. Fortunately a neighbour when doing a door knock of the neighbourhood found her dehydrated and ill. She was transported to hospital for care because she was so unwell.

Businesses are unable to trade during power outages. Following the June storms, catering businesses had to dispose of thousands of dollars worth of food and goods that spoiled due to a lack of refrigeration. Campgrounds and accommodation venues had to send their guests away as they could not provide adequate services to them.

Many residents also had to dispose of thousands of dollars worth of food due to spoilage. For many their home insurance did not adequately cover the cost of this food loss. For myself, our insurance only covered \$500.00, but I threw away over \$1,000.00 worth of food.

The negative press coverage of storm damage also decreases tourism to the regions meaning the impact on businesses is felt for much longer than just the immediate aftermath of the event. This was also significant as the roads were closed to all but local traffic for almost three weeks following the storm to ensure the safety of road users, however this also means that there is no outside trade for extended periods.

Service reliability according to the [Universal Service Obligation](#), outlines that Australian residents have the right to have:

“access to a reliable telephone service that has good voice reception and ensures connections and faults associated with this service are undertaken and repaired within a reasonable time”

And part of this agreement includes:

- 24 hour free access to emergency service numbers;
- [Priority Assist](#) (for those with a life threatening medical condition); and
- [Customer service Guarantee](#) (acceptable connection and repair timeframes)”

All of the above were not provided for residents of Healesville and surrounding suburbs for up to six days following the June 2021 storm. (And up to a month in some areas of the Dandenong ranges). There should be some kind of financial mechanism which encourages telecommunications service providers to meet these minimum terms of service in a similar way AusNet is required to pay compensation to consumers who are left without electricity for a certain period.

If legislation required this kind of compensation, perhaps providers would be more willing to invest in more resilient infrastructure.

5. How might such impacts be addressed to ensure greater reliability? How can the network resilience be addressed in regional areas?

From the limited amount of research carried out by the group, there seems to be some viable options for increasing the reliability of the communications networks around Healesville. These are:

- Backup systems able to be utilised and/or set up by the community until normal services are restored
- The purchase of an additional “COW” truck which can be quickly established in areas impacted by disaster events. These have the ability to fill short term gaps, ensuring communications are restored as quickly as possible and can be redeployed into other regions if required (resource sharing).
- Power services need to be transitioned to underground; specifically and especially the lines which power the communications towers (e.g. Mount St Leonard). This would lessen their vulnerability to both fire and storm events. Underground power has been recommended by

the last two Royal Commissions following major bushfire events, but no action has been taken to start this process.

- “Micro” grids could be established to lessen the reliance of all areas on the major grids which are vulnerable to a multitude of failures.
- More than six hours of backup power supply needs to be in place for all regional and remote communications towers as most are in locations that can result in many days delay in restoring power following major events.

6. How did the use of digital services change for regional consumers and businesses during the response to the COVID-19 pandemic? What insights for future service delivery does this provide?

Broadband has become an essential service during Covid-19 lockdowns with many people required to work from home and provide home schooling for students. For many people the available bandwidth has been inadequate to support these government imposed working arrangements. Frequent power outages exacerbate this issue. Even on a ‘powered’ day, 25% of Yarra Ranges shire does not have a usable connection. For a municipality with more than 150,000 people, this is unacceptable. There are ‘more regional’ municipalities who have far better and more reliable connection; why has Yarra Ranges and Healesville been left behind?

For myself, over the last two months I have had a loss of power of more than four hours on three separate occasions. This is outside of the six and a half days of no power following the June 2021 storm event. We have frequent power outages that are of a shorter duration, this means that if you are working you lose connection and have to wait for the power to be restored. If you are in a telehealth consultation, you lose your connection and can then have to wait several days for a new appointment.

9. What role could innovation, including new models, alternative investors or new ways of doing business, play to encourage investment in regional telecommunications infrastructure? What are the barriers?

Cost is a barrier to changing the infrastructure to a more sustainable and adequate model. There are plenty of opportunities to think outside the box when it comes to servicing Healesville and surrounds with a more innovative telecommunications and electricity network. For example, we could have micro hydro power generation in this area that utilises the Maroondah Dam and the Yarra River. Healesville Community Owned Renewable Energy group has already completed the scoping and feasibility study for a town battery network. This microgrid would utilise the large number of solar panels in the region, so that damage to power lines outside of the area would be less disruptive to services. More stable power and greater bandwidth would allow more reliable telecommunications which would encourage more people to work in the area instead of commuting into the city.

16. What other matters should the Committee consider in its review and why are they important?

The Yarra Valley is at an extreme risk of fire, the current services mean that we have large numbers of people who could be left without any form of emergency warning system and no way to track where a fire is.

Our amazing Volunteer services are at a huge risk if conditions were to change and there is not adequate communications available to warn them or our residents of impending danger... we could have a higher death toll than the 2009 bushfire season and this is an unacceptable situation.

For Healesville, another 130 FDI day is not an 'if', but a 'when'. The fuel loads have recovered and statistically, we should experience a Code Red fire danger day once every 10 years- this means we are overdue for our next Black Saturday recipe. Imagine a township which now has a less reliable connection to emergency services due to technology upgrades than it did during the black saturday bushfires. This is the reality that the 98% residents who were forced to transition to NBN face.