Submission to the Regional Telecommunications Review 2021—Issues Paper

Questions 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?

The Dandenong Ranges (from here on referred to as the Ranges) are considered by many as regional due to the area's terrain yet recognised as part of metropolitan Melbourne. Given the current inefficient and unreliable telecommunication service, the Ranges businesses are severely disadvantaged in all aspects of commerce.

Despite Ranges businesses competing with metropolitan Melbourne businesses due to our close proximity, Ranges businesses have restricted ecommerce opportunities due to the poor telecommunications infrastructure in the area. Ranges businesses and professionals struggle with poor upload and download speeds, intermittent internet dropouts and poor mobile coverage. This severely inhibits businesses and professionals working from home. Retailers and businesses with shop fronts in our communities, struggle with mobile and internet connection for simple tasks such EFTPOS transactions, phone orders and customer communications that metropolitan businesses rarely experience.

Unlike metropolitan Melbourne, the Ranges experiences severe weather and other natural disasters. These are expected to increase in frequency and intensity in the future due to climate change. The reputations of our local businesses are being questioned due to the vulnerability of the networks they rely on. Some Ranges areas experienced a 71 day wait for NBN to be restored and multiple changes of service restoration dates following the recent June 9th storm. Ranges businesses are concerned that without improvements to the telecommunications network, businesses in this region will be unsustainable. Although our Ranges businesses are highly adaptive, they simply cannot function when there is no built in resiliency and confidence in the telecommunications network.

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

The Ranges are being transformed by an increased population and a shift in demographic. Alongside this is the increased demand of high-speed internet. Although historically considered a blue-collar area, the Ranges has seen an increasing number of 'white collar' workers wanting a 'tree change'. The need to work partially or completely from home has increased the demands on our telecommunications network. The change in demand has exacerbated pre-existing challenges while revealing new challenges for the region.

One existing challenge is around mobile phone towers. Mobile towers are unable to sustain coverage after 3 hours once power is lost. Extending the length of time that towers can function without power is paramount to areas that experience natural disasters.

A new barrier has been created with the introduction of NBN. In heavily forested areas of the Ranges, above ground internet cables are frequently affected by falling trees and tree branches. The introduction of NBN has created a situation where end users and the NBN

wholesaler are now separated by the internet retailer. This has negatively affected end users in two ways. Firstly, they are unable to directly contact NBN wholesaler to notify them of outages and receive accurate information of potential restoration dates. Secondly, when an end user's mobile provider is different from their internet provider, there is no incentive for the two retail telco providers to work together to supply the end user with additional mobile data that would enable them to 'hot spot' devices while they wait for nbn service to resume. NBN outages range from several days to months making the question about whether residents can work from home, run a business or remote learn an unknown quantity.

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

There is concern in the Ranges around Telstra's announcement to decommission its 3G network. Many parts of the Ranges are still reliant on the 3G network as their only coverage. The gap in coverage between the decommissioning of the 3G network and expansion of the 4G network will impact many residents.

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

Reliability issues severely impact our region and our businesses. Poor NBN speed makes working from home and remote learning for children, high school students, and tertiary students extremely difficult and time consuming. Conducting online zoom or other tele-conferencing meetings or classes is unreliable, making communication very difficult. This has been particularly evident during our lockdowns.

Natural disasters severely impact Ranges communities and businesses, especially the tele communication networks. There is genuine concern for the safety of residents when both mobile phone and internet coverage are affected. Being unable to contact people in an emergency is highly problematic. Reaching a public Telstra phone booth often requires negotiating fallen trees and powerlines over several kilometres on steep terrain. During the recent June 9th storm, it was several days before anyone was able to confirm that all residents were safe due to the lack of mobile and internet coverage. Residents were unable to obtain important information about services available including emergency accommodation, food, and water. Businesses were also unable to communicate with customers for several weeks to update them on when they would be able to reopen.

The community were satisfied with the restoration efforts of the electricity providers despite some areas being without power for 21 days. Given the extent of the damage created by the June 9th storm however, this length of time was considered understandable, and compensation helped to alleviate costs.

However, residents were frustrated and angered that it took a further 50 days in some cases for the internet to be restored despite the NBN cables relying on the same above ground power line poles that were restored in a few short weeks. There was no coordination between the power and internet companies and although compensation was given to residents for loss of power, none was forthcoming for the loss of internet and the associated

business costs. Purchasing mobile data ran into the hundreds of dollars for residents who tried valiantly to work, conduct business and remote school during this time. n some households this involved the highly inadequate measure of hot spotting off a single mobile device that was passed amongst family members so that each might have an opportunity to access work or school. In some households, this measure needed to continue for 71 days.

Muster trucks were deployed at recovery hubs and village centres however they didn't account for residents being unable to travel to these areas, nor were these measures adequate for households to continue business or schooling requirements during lockdown. In addition, the freezing temperatures and poor weather were not conducive to being outside near the trucks. Muster trucks were therefore considered unsuccessful.

The June 9th storm and its impact on the telecommunications system in the area is not an isolated incident, however. A storm on July 27th this year and another in August 2020 also seriously affected many areas of the ranges in much the same way as the June 9th storm. The importance of the Internet being classified as an essential service is crucial to the survival of Dandenong Ranges communities and businesses that are now required to operate almost entirely in an online world. Making telecommunications an essential service would create a degree of accountability in an industry once again monopolised by a single NBN wholesaler.

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

Internet services must be placed underground in areas known for experiencing repeated line faults. Given the cost of transferring connections to underground, identification and prioritisation of specific streets must be determined and agreed within the Ranges area, rather than the region as a whole. This will greatly reduce the number of outages experienced by areas overall. Telecommunications must also be classified as an essential service to enable greater security and reliability for end users and hold service providers to a more acceptable level of accountability.

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?

Even before the COVID-19 pandemic, the Ranges region was a geographically challenging and isolating place to live. Digital services such as teleconferencing became essential to business, online learning, and the mental health of local residents. There is anecdotal evidence that local university students dropped out of subjects due to problems accessing online classes. Primary school students became quickly disengaged because they were unable to attend online class gatherings or view subject material. Digital services became overloaded resulting from the increased demands of multiple users in the house during lockdown.

7. What can be done to improve the access and affordability of telecommunications services in regional, rural and remote Indigenous communities?

The Ranges does not have a large Indigenous community, however one issue resulting from the June 9th storm that would have equally affected our more disadvantaged community members was the impact that the slow NBN restoration had on women (particularly single mothers) and the elderly, many of which use 'pay-as-you-go' plans. The cost of buying additional mobile data while waiting for the NBN to be restored ran into the hundreds of dollars, money which many low-income earners were unable to pay. There was real concern that low-income earners would forego spending money on food and essential items to top-up mobile data necessary for them to continue working from home or maintaining access to critical telecommunications in case of emergencies. For the elderly unable to pay for mobile data, telehealth appointments would have been cancelled or missed. This concern also applies for mothers of young children. In additional, mobility issues increased the concern for their health and wellbeing.

Mandating that internet and mobile retail providers work together to provide free additional mobile data is essential for ensuring our most vulnerable are not choosing data over other household essentials to survive.

8. How can investment in telecommunications infrastructure work with other programs and policies to encourage economic development in regional Australia?

Investment in telecommunications infrastructure would enable more residents, notably professionals and e-commerce owners to work from home. Currently, local retail outlets are heavily reliant on tourism. With more people working from home and remaining in the community as a result of the COVID-19 pandemic, there is an unprecedented opportunity to diversify our local economy to make it more resilient to changing local, national and international circumstances. Improved infrastructure that resulted in a more reliable telecommunications network would encourage locals to continue working from home, therefore remaining in the community, investing in the local economy, and enabling our local businesses to provide services for residents. This would reduce the current reliance on tourism and enable local businesses to grow.

In addition, investment in telecommunications infrastructure will benefit other programs and policies including Emergency Management, Education (notably Access and Participation programs) and the Youth Policy Framework.

Under Australia's National Disaster Reduction Framework, telecommunication is identified as an "essential service we rely on… a failure …could have wide-ranging consequences across communities, businesses, governments and economies" (p5). If telecommunications are recognised as essential to reducing disaster risk, features in the Australian Disaster Preparedness Framework and is considered too expensive to be placed underground, then establishing NBN as an essential service should be considered.

Investment in telecommunications infrastructure will create greater opportunities for our youth under the Youth Policy Framework. Having access to reliable mobile and internet services will bridge the digital divide for our youth and our local schools who continue to face a distinct disadvantage to those living in metropolitan areas.