

## Community of St Patricks River District (Tas) Inc. 39463 Tasman Highway, Nunamara TAS 7259 ABN 55310072764

### **Submission to Regional Telecommunications Review 2021**

#### Introduction

The Community of St Patricks River District (Tas) Inc. is a not-for-profit local organisation that represents persons living and/or working in the eastern portion of the City of Launceston Local Government Area.

Thank you for providing the opportunity for members of our regional community to present a submission that outlines our experiences and issues with telecommunications.

The St Patricks River District encompasses Mt Barrow, the St Patricks River and surrounding lands. Travelling along the Tasman Highway the district commences east of and approximately 10 kilometres from the City of Launceston GPO and continues through the township of Nunamara to the Sideling, a distance of approximately 30 kilometres. An indicative map of our district is attached. According to Australia Post figures, there are approximately 540 households within the district.

Although farming and forestry are the principal industries conducted within our area of interest many local residents travel to Launceston daily for school and work. Occupation groups present in our community include building trades, health and medical, all levels of education and the public and private sectors. Some of these residents have been asked by their employers to work from home during the current pandemic and others would be expected to work from home or continue studies from home if Tasmania was to implement a pandemic lockdown.

Our organisation's constituted Objects and Purposes include to:

- provide representation and advocacy for the community of the St Patricks River district of Tasmania; and
- pursue improved provision of services throughout the district.

### **Initial Comment**

We have read the discussion paper available on the website but we believe that you need to be made aware that it is difficult for us to contemplate solutions based upon the Internet of Things (IOT) when many of the households in our district are dependent upon satellite internet and reside in mobile phone blackspots.

#### **Concerns informing this submission**

Our major concerns with telecommunications within our district can be summarised as:

- Mobile phone services are:
  - Increasingly important for emergency workers and those who work alone or in small groups within our district;
  - o Not universally available, poor coverage and black-spots across our district; and
  - o Lagging technologies; it is unclear when 5G services will be locally available.

- Most people in our area can only access internet services via the SkyMuster satellite services which are:
  - Only marginally suitable for a person-to-person video call, provided the call occurs when the satellite is not experiencing traffic congestion or significant weather events;
  - o Not suitable for people who need to participate in multi-party video conference calls; and
  - Slower, more expensive and less reliable than fibre-based and fixed wireless-based NBN services offered to other locations.

The telecommunications infrastructure available in our district has not enabled residents to successfully work from home at a level acceptable to their employers during workplace lockdowns due to their internet being considered too slow to work efficiently.

- Landline phone services remain an important communication technology, especially for people living in an area with poor or non-existent mobile phone coverage. We are concerned that Telstra is progressively downgrading service delivery standards and attempting to eliminate landline services.
- At least one resident, living approximately 24 km from the Launceston GPO, is still using ADSL to
  access the internet and has not been approached by their service provider to switch to an
  alternate NBN technology.
- Due to local topography some residents near Nunamara (approximately 22 kilometres from the Launceston CBD), although being very close to the Mt Barrow TV Antenna are unable to receive reliable TV services.

Telecommunication services provided within the St Patricks River district and adjacent areas are generally not of a sufficient standard to effectively support home-based work or study beyond the needs of a single user in a household and not even then if there is a requirement for a resident to participate in a multi-party video conference with fellow workers. It is fortunate that to date the Tasmanian Government has not implemented stay at home orders to residents of this region. We are aware that stay at home (lockdown) orders were implemented on the North West Coast of Tasmania during the 2020 Covid-19 outbreak centred on Burnie.

#### **Issues**

Telecommunication issues experienced by our members and others in this area can be roughly grouped under the following headings:

- 1. Mobile Phone Services
- 2. NBN Internet Services
- 3. Landline Services
- 4. TV Reception

#### 1. Mobile Phone Services

With the increased penetration of mobile coverage, it is frequently assumed that most (if not all) Tasmanian residents are now within mobile coverage and that most state highways and more significant roads (the so-called A and B roads) have continuous mobile coverage. It is also a common assumption of governments at all levels that during times of significant emergency (e.g. fire and or flood) relevant authorities can easily communicate with people likely to be impacted by, or recovering from an event using existing mobile services.

Mobile phones are increasingly seen as a safety system for farmers, forestry workers (including log truck drivers) and workers maintaining and operating critical infrastructure (power networks, transmission networks, irrigation and water supply infrastructure), and workers in the building trades who typically work alone or in small groups across the area. Mobile phones also provide more cost-effective communication services for interaction between members of the public and with emergency services.

The services that users of mobile phones have come to expect as core services have expanded beyond simple voice-based calls to encompass a range of message services and internet-based two-way content delivery. The wide-spread adoption of the Internet of Things (IOT) may be able to commence with so called 4G mobile services, but is unlikely to until 5G mobile services become universally available across farms and rural holdings.

Whilst 5G services are being progressively rolled out in unban and metropolitan areas the residents of our district are still highly dependent on 4G and even 3G mobile services that are not universally available across our district.

The Federal Government's Mobile Black Spot Program has delivered 2 Telstra mobile towers in our district (located at Nunamara and Targa), that are complemented by services from some towers outside the district. However, there is not continuous mobile coverage along the Tasman Highway (Road Designation "A3") including:

- Limited mobile coverage from Telstra with the following disclaimers:
  - No coverage along a particularly winding and forested 4 km (approx.) stretch of the highway adjacent to Distillery Creek (commencing about 7 kilometres from the edge of the Launceston suburban area); and
  - Limited or no coverage across the Sidling to the east of Bank Road (and generally poor coverage where it does exist).
- No mobile coverage from Optus or Vodaphone beyond about 5 km from the edge of suburban Launceston on the Tasman Highway until the eastern side of the Sidling.

The Black Spot along the Tasman Highway mentioned above is not heavily populated and anyone involved in an incident requiring the provision of an emergency service or roadside assistance either needs to make their way to somewhere within mobile coverage, flag down a car and request they make a call when they exit the blackspot, or try to make contact through a local residential property, which can be more than a kilometre off the highway.

There is generally poor or non-existent mobile coverage away from the Tasman Highway including significant areas such as Patersonia, Tayene, Camden Dam and much of the southern portion of Prossers Road.

Residents using mobile services provided by Telstra's Nunamara tower report that the service significantly degrades in the early evening. We understand that this tower has capacity for 98 Mbps on 4G services and 62 Mbps on 3G services; these seem to be very restrictive limits for a relatively modern tower installation. For users who rely on mobile data for internet data services, possibly because Satellite services could not be installed, this typically results in a service that is too degraded to allow streaming of entertainment services such as NetFlix.

We are aware of a number of residents who have felt the need to either install physical infrastructure to boost poor mobile reception or invest is more expensive satellite-based phone services. Even after installation of physical infrastructure to boost mobile phone reception some residents report that their service provider is only able to notify them when they received a phone-based message. To read the message and respond they often need to travel to an area within mobile coverage.

We accept that the terrain is difficult, in some cases there is a limited number of potential users spread across a relatively large area and it may be more expensive and less cost effective to install and maintain effective mobile coverage throughout the whole region. However, our members frequently voice concerns about the level of communication, area coverage of existing services and projected new services and progress toward fully delivering on the mobile phone back spot program.

Depending on the source of information it is understood the mobile black spot program was to deliver 5 or 6 new mobile towers within our district. At one stage there was an announcement that 3 towers would be built by Telstra before July 2017. In any event 2 Telstra mobile towers commenced operation in 2017 (at Nunamara and Targa) and even at the opening ceremony Telstra representatives expressed surprise that these towers had not provided continuous mobile coverage between the outer fringe of suburban Launceston and Nunamara (a distance of about 12 kilometres). Both Optus and Vodaphone apparently elected not to co-locate mobile services on these Telstra towers.

It is painfully obvious to local residents and workers that the mobile coverage maps published by Telstra, Optus and Vodaphone are at best optimistic and at worst little more than deceptive marketing documents.

#### 2. NBN Internet services

The vision of the NBN was presented to Australians as a new standard for universal service delivery in an increasingly data-driven economy. At least on our district this vision has not been even partially realised.

An NBN fibre backbone cable runs along the Tasman Highway, through our district, between Launceston and Scottsdale and a separate Telstra Mobile's back haul fibre cable also traverses beside the Tasman Highway between Launceston and Targa. Despite these fibre cables running close to the homes of some of our members we understand that no residents have access to high-speed NBN fibre-based internet service (including technologies such as fibre to the premises, fibre to the curb, HFC etc).

A very small number of residents toward the eastern and northern extent of our district are able to connect to internet services via NBN's Fixed Wireless Network. This is a data-only option and residents must still use either a landline or mobile phone service for voice calls.

The great majority of our residents are forced to use NBN's SkyMuster Satellite services. There are a number of significant issues with the use of Satellite-based Internet services including:

 Several local residents have reported that they have been unable to instal an operable NBN SkyMuster service. We are unable to confirm why this may have occurred or how it could most effectively be resolved.

- The service is based on geo-stationary satellites which results in significant latency in data delivery. Latency becomes a significant issue in video conferencing calls and in poorly structured on-line applications, which assume that all users have a low latency service. Government and banking applications are annoying when screen repainting and data entry is not optimized for services with significant latency.
- The bandwidth available on the satellite service is limited to a maximum 25 Mbps download and 5 Mbps upload. This should be compared with 100 Mbps download and 40 Mbps upload available on other NBN (fibre and fixed wireless) networks.
- The combination of significant latency and low bandwidth makes it difficult to participate in internet-based video conferences. Typical experiences are that video calls are passable, but not good between two users, but suffer from picture freeze and disjointed or totally dropped voice communication.
- Unlike fibre or wireless based NBN plans there is no option for unlimited download data limits with NBN Satellite-based services.
- The pricing of NBN customer plans is heavily weighted against users of the SkyMuster Satellite service. Compared to fibre and wireless based internet services the SkyMuster-based services:
  - Offer slower download and upload performance;
  - o Impose significant limitations of the quantity of both download and upload data per month;
  - Artificially divide available network usage into peak and off-peak times, with about 20% –
     25% of monthly data allowance being available during "peak periods" (7am and 1am the next day) with the remainder being available only in off peak times (between 1am and 7am); and
  - o Are significantly more expensive per unit of data transferred.
- Performance of SkyMuster is heavily dependent on issues such as weather and it is quite common for SkyMuster services to disconnect during heavy rain. In addition, the local connection to SkyMuster is only as good as the users local power supply. During bushfires the regional power supply is often curtailed at the direction of local fire chiefs.
- NBN have continuously failed to provide a roadmap for bandwidth beyond the current 25 Mbps download, 5 Mbps upload, or for significantly extending the current download / upload capacity limits.

#### 3. Landline Phone Services

Telstra currently operates a public phone adjacent to the Nunamara store. We understand that this has recently been changed from a pay-phone to a free-service facility.

Most of our members traditionally had a Telstra landline service. In many cases Telstra provided excellent cable infrastructure and were responsive when called out for break/fix repairs. In recent times, some members who do have moderate mobile phone coverage have disconnected their landline service, typically in an attempt to limit their overall telecommunications charges.

A number of our members have reported that their landlines are best described as a cable strung between a number of trees in a reasonably forested area. Here the issue is that the cable is often damaged during adverse weather and is not at all protected from natural disasters (fire and flood).

It had been hoped that these types of cable installations would be progressively upgraded as the nation moved to a new telecommunication paradigm was implemented. Unfortunately, the poor

infrastructure has remained and must still be used because of poor / non-existent mobile phone coverage.

## 4. TV Reception

Due to local topography some residents near Nunamara, very close to the Mt Barrow TV Antenna, are unable to receive reliable, if any TV services.

Signatures of authorised persons

Ian Dalton

**Secretary Treasurer** 

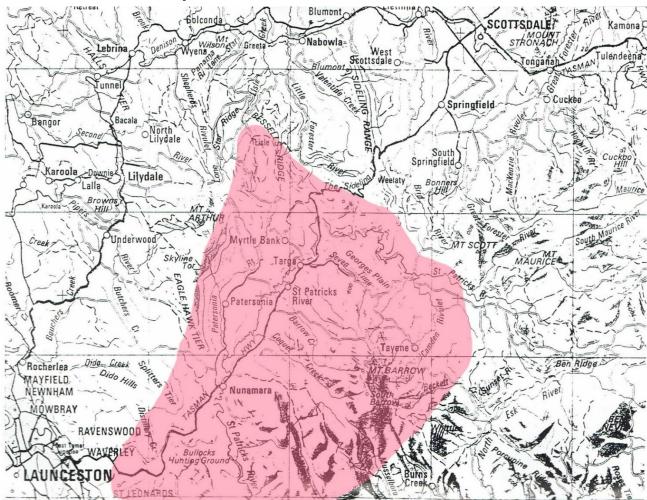
27 September 2021

Ron Reinhard Vice President

27 September 2021

# **Appendix**

## **Our Community**



St Patricks River District is located towards the North East of Tasmania, in the east of the municipality of the City of Launceston. The river nestles between two of the region's most significant natural landmarks, Mount Arthur to the west and Mount Barrow to the east. Mt Barrow is one of the tallest mountains of the north-eastern highlands at 1413 metres, offering magnificent views, rainforest and alpine vegetation. Mount Arthur is a majestic peak standing 1188 metres, overlooking the town of Lilydale to its north.