

Risks and Vulnerabilities of Telecommunications in Harrietville, Northeast Victoria

The town of Harrietville is 23km from Bright in the Upper Ovens Valley, and is part of the Alpine Shire, it has a population of around 400 people and is a hub for outdoor activities and recreation as well as a vibrant community with a mix of people who work locally, remotely and from home. However, it is also prone to bushfires and flood and given this, Emergency Management Victoria (EMV) engaged with the community to produce the 2014 Harrietville Community Emergency Management Plan (CEMP). This plan aimed to:

‘support people to build relationships and develop solutions to become safer and more resilient towards the impacts of extreme weather events and emergencies. This will be achieved by working together to manage the priority risks and consequences caused by natural hazards including local bushfires, floods and landslides.’

Source: <https://files-em.em.vic.gov.au/public/EMV-web/Harrietville-Community-Emergency-Management-Plan-Sept-2014.pdf>

One key component of successful emergency management in the phases of preparedness, response and recovery is the existence of robust and reliable communications, both in human and infrastructure terms. However, the CEMP identified some ‘Key Issues and Vulnerabilities’ these were:

- Limited Mobile phone coverage – Telstra mostly available, no Vodaphone – locals know this, but tourists are ill equipped.
- Free to air/digital TV reception comes via a repeater tower along with one ABC radio station that could be vulnerable to fire. (many have Foxtel or remote satellite systems that can be affected by poor weather.
- Internet connections are restricted – Telstra has advised it will not be providing new connections and NBN is not available other than by satellite.

Frequently EMV and responding agencies provide vital information during emergencies by electronic means such as identified hazards and warnings, evacuation advice, community updates and recovery information. The Vic Emergency website and app to name one source relies on having a good connection. The communication flows two ways with local agencies relying on the internet to send mapping files and updates and other associated data plus the option to be part of management team meetings via online means.

These vulnerabilities above were identified in 2014 and nothing has significantly changed in 2021, other than the addition of Optus for mobile coverage within the town, but this has limitations elsewhere in the regional area and therefore does not have a high customer base. Harrietville still has poor mobile phone coverage, and still relies on a TV repeater station which is fragile in nature and kept running by a small group of community volunteers who regularly fix outages, risking themselves and their own equipment when accessing the tower which is on a local high point. As mentioned, satellite services don’t work well in

steep sided valleys, smoky conditions, and inclement weather, additionally TV services received this way do not provide local tailored content.

The Internet situation is also still exceptionally limited with only certain parts of the town able to receive an ADSL2 service which Telstra poorly maintains due to ageing and obsolete infrastructure, with new connections frequently denied. Other solutions for internet are wireless or satellite however reception is constrained by topography and conditions. NBN Co is still not providing a fibre option for any homes past Bright. There is however a fibre optic cable running through Harrietville and up to Mount Hotham however only the Primary School can benefit from a broadband connection as part of the Department of Education policy. Whilst the TV reception and internet are separate issues they are co-related as when TV signal stops residents turn to streaming which then overloads the exchange and the whole systems slows and sometimes becomes unusable. Recent needs for internet due to pandemic restrictions have also tested the fragile system that exists and been a constant source of frustration for residents.

Questions have therefore been raised as to why strong robust fibre communications cannot be provided to Harrietville residents and it appears the costs outweigh the identified risks to the community however no actual costs have been divulged and the situation persists.

In mid 2020 the Federal Government announced funding for the expansion of the NBN Co footprint, having taken some time to release how this funding will apply, it appears that the scheme is a co-investment fund and support is required at local, state or federal level in order to progress applications and funding partners must be found to part sponsor the project.

The NBN Co co-investment fund has key dates as per below:

Activity	Estimated timeframe
Guidelines released and applications open	23 June 2021
Closing date for receiving build estimate requests	5pm 1 October 2021 (AEST)
Closing date for receiving build quote requests	5pm 19 November 2021 (AEDT)
Closing date for receipt of Applications	5pm 18 February 2022 (AEDT)
All upgrade work expected to be completed by	30 June 2024

Source: <https://www.nbnco.com.au/corporate-information/media-centre/media-statements/nbn-co-invites-applications-for-regional-co-investment-fund>

There have been funding opportunities offered previously via the Federal Government Regional Connectivity Program which East Gippsland Shire managed to capitalise on but nothing has been achieved for Harrietville and surrounds. Thus far there has been no significant progress by any local government or community group to address this situation, and it is acknowledged that Harrietville is not the only town within the Alpine Shire who are vulnerable to hazards and generally lack adequate communications more suited to expectations in 2021. The Alpine Shire Council are in the process of commencing the *Mobile*

and Internet Communication's Strategy for Alpine Shire Council, Alpine Resorts, and Towong Shire Council and employing a Technology Consultant who can assess telecommunications in the Alpine and Towong Shires however a final report at this stage is not anticipated until November 2021.

The towns within the Alpine Shire face not only the physical challenges of natural hazards in an ever increasing climate change affected environment but the smaller sizes of towns present other limitations as the cost of infrastructure is always balanced against potential economic returns.

Therefore, this short paper seeks to bring attention to the fact that Harrietville and other small towns in the Alpine Shire have identified long standing key risks that require a higher level of analysis to seek out solutions. There appears a lack of action to address technology deficiencies in this region that perhaps have logistical solutions such as NBN Co providing fibre to the home or fixed wireless solutions at a minimum or wireless tailored networks via other providers using existing fibre cables a mix of technology owned by competing companies.

EMV have been from the outset been enhancing coordination and streamlining the response systems in Victoria whilst working hard to increase resilience within communities which is evident in the creation of the Harrietville CEMP. However, some longstanding key issues are outside the control of the community and require a higher level of influence.

Support is therefore sought in advocating for towns such as Harrietville in particular via the *Mobile and Internet Communication's Strategy for Alpine Shire Council, Alpine Resorts, and Towong Shire Council*. Any advice and recommendations as to how these telecommunications vulnerabilities can be overcome will also be actively embraced.