

Mobile Coverage Programme Discussion Paper

Submission Cover Sheet

Submission Information

This cover sheet should be attached to submissions made to the Department of Communications in relation to the Mobile Coverage Programme Discussion Paper.

Contact Details

| | |
|---------------------------------|-----------------------|
| Name of respondent: | ██████████ |
| Name of organisation: | Newbury CFA Fireguard |
| Phone: | ██████████ |
| Email: | ██████████ |
| Website (if applicable): | |
| Date: | 26/02/14 |

Confidentiality and privacy

All submissions and comments, or parts thereof, will be treated as non-confidential information unless specifically requested, and acceptable reasons should accompany each request. Email disclaimers will not be considered sufficient confidentiality requests.

Respondents lodging a submission should be aware that submissions (excluding any information agreed to be treated as confidential information) will be made publicly available, including on the Department of Communications' website. Submissions and comments will be subject to freedom of information provisions. Despite a submission being identified as confidential or sensitive, submissions may be disclosed where authorised or required by law, or for the purpose of parliamentary processes.

Do you want all or parts of the submission to be treated as confidential? **No**

If yes, identify below which parts of the submission are to be treated as confidential (and provide a reason):

If the submission contains personal information of any third party individual, indicate on this Submission Cover Sheet if that third party individual has not consented to the publication of his or her personal information:

Submission Instructions

Submissions are to be made by **5:00pm (AEST) Friday 28 February 2014**.

Where possible, submissions should be lodged electronically, preferably in Microsoft Word or other text-based formats via the email address mobilecoverage@communications.gov.au

Alternatively, submissions can be sent to the postal address below (to arrive by the due date):

The Manager
Mobile Coverage Programme
Department of Communications
GPO Box 2154
CANBERRA ACT 2615

All submissions lodged will be acknowledged by the Department of Communications by email (or by letter if no email is provided). Respondents lodging a submission who do not receive acknowledgement of their submission should contact the Department. Submissions which are not acknowledged by the Department as being received may not be considered. Respondents should be aware that emails greater than 10Mb may not be successfully delivered.

SUBMISSION TO AUSTRALIAN GOVERNMENT DEPARTMENT OF COMMUNICATIONS

SUBMISSION FOR NEWBURY VICTORIA - REGISTRATION AS A BLACK SPOT

SUBMISSION FOR MOBILE NETWORK EXPANSION PROJECT

Submission by members of CFA Fireguard No. 2557 Newbury Victoria 3458

Submission author:



NEWBURY

Perched on a crest of the Great Dividing Range, Newbury is a small rural settlement within the Central Victorian Shire of Hepburn. Surrounded by the Wombat State Forest, Newbury is a high fire-risk area nestled between Trentham and Blackwood, two of the 52 Victorian townships identified in 2009 as most vulnerable to bushfire.

The mountainous region is difficult terrain. The dense native forest has a ground cover of eucalypt leaves, bracken and blackberry bramble. The fuel loads, steep valleys and poor access further increase the seriousness of a bushfire within this forest region.

POPULATION

PERMANENT AND SEASONAL

Although Newbury itself has a relatively small population of 292, its numbers can swell significantly at various times. The picturesque forest road is heavily used on weekends and holidays, and is popular with car clubs, motorcyclists and bike-riding groups.

Blackwood, Trentham and Daylesford are popular destinations, encouraging a steady flow of tourists to the region. Newbury itself also is a destination for bushwalking groups, who climb to the fire lookout on Blue Mountain for its 360 degree views of the region.

Another important drawcard to Newbury is a property on the slopes of Blue Mountain. 'Kattemingga' is a well established location for film and television production, incorporating studio and sets, period reproduction buildings, props, support services and accommodation.

International and local production companies have used these facilities for feature films, series, commercials and photographic shoots. Examples include 'The Man from Snowy River' and the US produced television series, 'Ponderosa'. Major productions such as these bring large numbers of cast and crew into Newbury and its surrounds for several weeks at a time.

In addition the venue is used for conferences, weddings and other events, with full accommodation available.

ISSUES AND THREATS

FIRE

The following are current government assessments of the Newbury fire risk:

Dept of Transport, Planning and Local Infrastructure - Regional Bushfire Planning Assessment

Cluster of rural-residential dwellings and undeveloped land at Newbury is surrounded by state forest and associated bushfire hazard area.

Cluster of dwellings at Newbury relies primarily on a single road for access and egress from bushfire hazard area.

Source: http://www.dpccd.vic.gov.au/__data/assets/pdf_file/0016/101473/RBPA-Grampians-Part-1.pdf

Country Fire Authority

Assessment of Trentham's fire risk (including surrounds)

Fire Authorities have assessed Trentham as having an EXTREME bushfire risk. Local residents and visitors should be prepared for fire and have a plan for when the Fire Danger Rating is SEVERE, EXTREME or CODE RED

Source: http://cfaonline.cfa.vic.gov.au/mycfa/Show?pageId=publicDisplayDoc&fname=2012/CIG-W-GRA-Trentham-2_00_48765.pdf

Newbury's Fire-fighting Capacity

Nearby Trentham has an active CFA and provides support to Newbury and other neighbouring areas where possible. In the event of major fire activity the access road to Newbury may not be usable, or Trentham's resources may be unavailable due to demands elsewhere.

In Newbury itself, what resources available are those owned by individual landowners, and of limited capacity. If neighbouring resources are tied up, or the sole access road is blocked, then Newbury is very vulnerable to serious bushfire danger.

Recent Experience

Newbury has experienced severe bushfire threat in recent years. Shortly after Black Saturday in 2009, a bushfire near Daylesford threatened Newbury and nearby locations. Urgent warnings were issued by the Department of Sustainability and Environment

Source: <http://www.theage.com.au/national/firefighters-hurt-in-battle-to-save-citys-fringe-20090223-8fwn.html>

Emergency Broadcasts

On the evening of Monday February 23, 2009, a major fire near Daylesford, fanned by strong winds, began spotting several kilometres ahead. For residents without reliable mobile phone or internet coverage, the most relevant source of information was the ABC's emergency service on Radio National.

In a short time Newbury experienced an ember attack, with burning wood particles and leaves touching ground, still alight. This extremely serious situation was saved by a sudden, welcome wind change. This diverted the embers away from Newbury and on to nearby Trentham, which fortunately was better equipped and able to control the series of fires that broke out.

An interesting point to note is that several minutes after the threat to Newbury had passed, the ABC broadcast an urgent threat message to Newbury and other areas. By no means is this a criticism of the ABC service, but a pointer to the time-lag, and the importance of having more immediate information sources available.

Today we have access to excellent online resources that warn of such events. Unfortunately being actually able to access those resources when most needed is currently not a reliable option in our area.

WEATHER

Newbury experiences huge seasonal variations. The average annual rainfall of Trentham is 1151 mm. In 2013 Newbury recorded an annual total of 1209mm, very close to double the state's area average of 608.46 mm.

Newbury and the area around Blue Mountain also frequently record snowfall. Heavy falls are not unusual, with sufficient weight to bring down large branches and power lines. The local State Emergency Service has a long history of responding to heavy rainfall, high winds, trees down on powerlines and over roads, and snowfalls within this area.

COMMUNICATIONS AND POWER

Electricity and fixed line telephones

The effect of weather conditions on local power services is considerable. Severe rain, wind and snow events regularly impact on power supplies with power outages for several hours, sometimes days.

In these conditions fixed line telephones using an electrically-powered base station will not work. Non-powered older-generation telephones will still work, successfully dialling the number and generating a call.

However modern switchboards - those widely used in many large organisations such as power companies, emergency services etc - are automated, requiring the caller to select the appropriate prompt. Older dial-type telephones do not generate this pulse and will not work in such a situation unless there is an automatic default to a (human) operator after a certain passage of time.

In these conditions the most reliable fall-back position would normally be the mobile phone, but for most Newbury residents, that is not an option.

Internet- Fixed

For rural residents previously without connectivity, the NBN satellite service has enabled access to essential online services. While this obviously makes a huge difference for communities, the interim satellite service has its limitations. In an area such as Newbury the drawbacks are drop-outs, slow downloads and very slow uploads. Data speeds are not keeping up with the heavy-duty but increasingly typical demands of applications, media and communication needs.

Unfortunately also there are many households which missed out on the interim satellite. The two dedicated NBN satellites scheduled for launch next year will be an enormous improvement for all in our community.

In the context of fire and other natural disasters it is also important to remember that the satellite service delivery relies on electricity to power the dish itself. Power is one of the key infrastructures that fail during an emergency. Prior experience tells us that in Newbury we can realistically expect to lose power and therefore all power-reliant communications.

Internet- Mobile

Varying with atmospheric conditions, connecting to the internet by mobile phone is highly problematic, as is making a mobile phone call.

Residents report traipsing all over properties climbing hills, pulling a phone up a flag pole and more, all in search of an elusive signal. When finally found, the signal strength is usually poor - pages load slowly and the connection often drops out partway through loading.

Although some sites such as VicEmergency offer quick loading text-only options, the large majority of sites use high data, content rich material that is slow to load, and often drops out before the basic information is retrieved.

Mobile Telephones

Telstra coverage maps indicate that most of the Newbury area has mobile coverage for both voice and data, however this is not the case. Mobile reception in this area tends to be the exception rather than the norm.

Telstra also qualifies its coverage statement by indicating that some areas may require the addition of an external antenna. Again this is not the total answer. The antenna does boost

the signal, but this is still affected by geographic and atmospheric conditions, and the range is limited. Typically other structures - trees, hills etc - block the signal.

Based on this current level of coverage, the result is that if a grass-fire breaks out in a paddock, or smoke is visible within the forest, the mobile phone network cannot be relied upon.

Emergency Communications

According to Telstra's website their mobile telephone service covers '99.3 per cent of the Australian population across more than 2.3 million square kilometres'.

Little wonder then that mobile phones have become the default contact method in the event of an emergency, especially given that power supplies are often first to go.

Unfortunately for the 0.7 per cent of the population without this degree of coverage, communication can be severely compromised.

The Great Divide

In 2009, following Black Saturday, and during a subsequent period of further high risk, Victoria Police took the unprecedented step of sending state-wide SMS and twitter alerts.

While one couple in Newbury did not receive the text until they drove into mobile range several days after the fire danger had passed, their daughter, travelling in South America, had received the alert when first sent. Understandably she was frantic until finally able to reach her parents.

This situation highlights the importance of having mobile communications in high-risk areas where remoteness or simply local conditions greatly increase physical danger.

Emergency communications rely on individuals having ready access to services when power is down - this means mobile devices with voice calls, SMS, email, internet, enabling people to make informed, life-saving decisions.

CONCLUSION

Victorian regional areas with proximity to rail links and highways are growing quickly, attracting retirees, tree-changers, and self-employed people operating home-based businesses. Newbury, Trentham, Daylesford and other neighbouring areas are typical of this demographic shift.

While many of these 'new' areas have very good communications already in place, some do not, principally by nature of their geography and the limitations of existing infrastructure. It is this that places areas such as Newbury at a disadvantage and, at times, physical risk.

The previously mentioned Blue Mountain Fire Lookout Tower may offer a means of enhancing communications for the area, and is outlined in a separate submission by Newbury Fireguard, 'Consideration of Upgrading Existing Public Asset to Establish Wider Regional Services'.

Whatever means are decided upon, we hope that our Black Spot difficulties can be overcome with the support of this initiative by the Australian Government Department of Communications.

On behalf of CFA Newbury Fireguard No. 2557 Newbury Victoria 3458

SUBMISSION TO AUSTRALIAN GOVERNMENT DEPARTMENT OF COMMUNICATIONS

MOBILE NETWORK EXPANSION PROJECT

CONSIDERATION OF UPGRADING EXISTING PUBLIC ASSET TO ESTABLISH WIDER REGIONAL SERVICES

Submission by members of CFA Fireguard No. 2557 Newbury in the Victorian Shire of Hepburn

Submission author:



BACKGROUND

Newbury is a small rural settlement between the towns of Trentham and Blackwood within the Central Victorian Shire of Hepburn. Perched on a crest of the Great Dividing Range, Newbury is surrounded by the Wombat State Forest. It sits at an altitude of 758 m and is the highest point in its region.

KNOWN THREATS

BUSHFIRE

The Shire of Hepburn report for Regional Bushfire Planning Assessment (April 2012) identifies Newbury and neighbouring Trentham as being bushfire hazard areas, with following details:

Cluster of rural-residential dwellings and undeveloped land at Newbury is surrounded by state forest and associated bushfire hazard area.

Cluster of dwellings at Newbury relies primarily on a single road for access and egress from bushfire hazard area.

In 2009, shortly after Black Saturday, Newbury was impacted by a major fire at Daylesford, with the fire spotting several kilometres ahead. Burning material fell on properties in the Newbury area prior to a 'just in time' wind change. This change directed the front towards Trentham, where the CFA and townspeople then managed to extinguish a number of fires. This wind change without doubt averted major disaster for Newbury which, due to its small population, lacks the infrastructure and numbers required to control such a threat. It has no local fire service of its own.

Neighbouring Trentham and Blackwood - two of the 52 Victorian towns identified in 2009 as most 'at-risk' from fire - both have CFA trucks. Between Newbury and each of its neighbours are kilometres of dense, fire-prone forest - Trentham a distance of 5 kilometres and Blackwood 8.4 kilometres.

Newbury residents cannot and do not routinely expect to rely on neighbouring CFA resources. Trentham has its own much larger area and population to protect, along with other outlying regions. In addition, a fire event close to Trentham, Newbury, Blackwood or other local areas could very likely render the single access/egress forest road extremely dangerous.

It's important to note that in 2011 Blackwood was recognised as 'undefensible' in a bushfire emergency. The severity of this situation led to the construction in the town of Australia's first co-located Community Fire Refuge and Country Fire Authority fire station.

Given this serious fire threat in the local region, and the realistic possibility that outside resources may not be able to assist, Newbury's residents have formed a proactive community-based fire-guard. This group works collectively to prepare for, anticipate and warn of fire threats, and to maximise available resources to protect the community.

WEATHER/ATMOSPHERIC CONDITIONS

Newbury is historically an area of very high rainfall, also experiencing heavy snowfalls and high winds, all of which contribute to emergency events.

These weather conditions regularly impact on local communications causing power outages, loss of (powered) telephone landline services and disruption to radio/television reception and internet.

Newbury was identified by Australian Communications and Media Authority as an area likely to experience regular disruptions to television reception following the switch-over to digital. This has proven to be a correct assessment.

Satellite internet as well as mobile phone coverage also both appear to be significantly impacted by atmospheric conditions, even in 'good' areas.

EXISTING ASSET

Newbury is the site of the Blue Mountain Fire Lookout Tower. This tower is situated at an altitude of 873 m. It had previously been operated as a manned fire tower every fire season until recent years when funding was reduced. During the current 2013-14 fire season it is being regularly manned.

LEVERAGE OF EXISTING ASSET

The Blue Mountain Fire Lookout Tower is currently an under-utilised asset with great untapped potential. Feasibly it could be utilised to solve communications issues not just for Newbury but a wider area comprising many small settlements. These other areas would otherwise require tailored individual solutions, each potentially involving protracted discussion over new infrastructure, and incurring major expense, with associated planning issues, community dissent, and political angst.

Given the history of resistance to new towers in local communities, it therefore makes sense economically and politically, to consider the use of any suitable existing infrastructure to achieve a positive result. By utilising Blue Mountain tower's capacity as a communications tower, it has the potential to provide an important service to local communities, whilst at the same time potentially avoiding major expensive alternatives that may be completely unnecessary as well as socially divisive.

ADVANTAGES AND BENEFITS

Newbury

The Blue Mountain Fire Lookout Tower has clear line of sight to the Mount Macedon Tower. Given this infrastructure is already in place and is effectively a wasted resource, it seems logical that this tower could be equipped to receive/relay the Macedon signal and so greatly improve reception for Newbury.

Neighbouring Communities

In this case, the boosted signal could also potentially benefit a number of neighbouring communities. Most of these are also mobile black spots and in high fire risk areas. These communities are requesting improved communications infrastructure, including new towers if necessary. All these areas are at a lower altitude than Newbury, and within reasonable range of the existing Blue Mountain tower.

LINE OF SIGHT TO BLUE MOUNT TOWER (ALTITUDE 873 m)

Following are the relevant towns, with altitude and population statistics (population sources ABS 2011 Census and ACMA North Central Switchover)

| | | |
|--------------|---------|-------------------------|
| Barry's Reef | 652 m] | See Blackwood |
| Blackwood | 566 m] | Combined Population 297 |
| Simmons Reef | 575 m] | See Blackwood |
| Bullarto | 750 m | Population 360 |
| Fern Hill | 625 m | Population 260 |
| Glenlyon | 561 m | Population 638 |
| Lyonville | 722 m | Population 253 |
| Musk | 657 m | Population 320 |
| Newbury | 758 m | Population 292 |

'Black spots' in areas which are generally considered covered may also benefit. Potential black spot areas include Trentham, East Trentham, North Blackwood, Spring Hill, Tylden.

CONCLUSION

Newbury and neighbouring areas are all particularly vulnerable to weather-related natural disasters, with fire the major threat. Additional extreme weather factors also impact at other times of the year, rendering communities at risk of severe storms, high winds, as well as ice and snow-related problems.

The geographical terrain contributes to the difficulties facing local communities, with natural features blocking communication signals. However one natural geographical feature that we have here in Newbury - the peak of Blue Mountain, and one man-made feature - the fire look-out tower, may well prove to provide an opportunity to overcome many of these problems.

We hope that this suggestion proves worthy of consideration, and ultimately brings benefit not just to Newbury residents but many more in the wider rural neighbourhood.