

Consultation Submission - Mobile Black Spot Program Round 5a - Design Options

1. Purpose

To provide a snapshot of the current telecommunications network capacity in the Northern Grampians Shire in response to the Australian Government's discussion paper seeking stakeholder feedback on the design options for round 5a of the Mobile Black Spot Program. This submission will focus on the importance of reliable network coverage and digital connectivity for ratepayers, businesses, visitors and emergency services across our remote and regional communities.

2. Background

Located in the Wimmera Region of Central West Victoria, Northern Grampians Local Government Area covers 5,918 square kilometers and includes the towns of Stawell, St Arnaud, Great Western, Halls Gap, Marnoo, Glenorchy, Stuart Mill and Navarre.

The resident population of Northern Grampians Shire is 11,439 (2016 Australian Bureau of Statistics Census).

Our region is underpinned by an economy based on agriculture, health and social services, manufacturing, mining, renewable energy generation and tourism. However, we also face challenges of changing weather and climate impacts, poor health and social outcomes, higher infrastructure, waste management and maintenance costs and an aging population.

Council's consultations with our small towns and communities have consistently identified as one of their highest priorities, the need for access to reliable mobile connectivity and fast internet.

Reliable mobile coverage and digital connectivity is vital to regional towns and communities, and in particular areas of high bushfire risk.

3. Mobile Black Spot Program Round 5a Design Principles

Council broadly supports the design principles set out in the [Mobile Black Spot Program Round 5a discussion paper](#) and is in particular, the three priority area funding components.

Question 1 *Are there any comments on the coverage areas proposed to be targeted?*

Council believes that the Australian Government has arrived at the correct priorities to fill gaps in the network that have not been successful in securing program funding largely due to project ineligibility.

1. *high priority natural disaster prone areas including those affected or prone to bushfire.*

The communities in Northern Grampians Shire Council have been visited all too regularly by the impact of natural disaster, including fire and flood.

The importance of reliable network coverage is critical to local emergency services personnel on land and in the air, as well as residents of communities in areas of high bushfire risk. Council consistency receives concerns about network coverage and reliability from its residents who want to be able to receive timely emergency warning updates in the event of an emergency.

2. new technology solutions in areas where low population densities have discouraged applications under earlier rounds.

Council strongly supports the focus that is implied by this priority. With the costs of constructing a cellular tower estimated to be in the range of \$800,000-\$1,000,000 and significantly more in remote or hard to access areas - opportunities to augment the network via more affordable infrastructure such as small cells and cell-fi aerial units for smaller communities where new tower infrastructure would be cost prohibitive, is extremely encouraging.

The current model of constructing major cellular towers to improve network coverage and connectivity offers a poor return on investment for telecommunications providers in areas of low population density. With high construction and ongoing maintenance costs and a likely low customer base, this is a disincentive in gaining investment to improve the network from private telecommunications companies.

Coverage maps that Council has seen suggest that the main failure of the network is not that coverage is nonexistent, however, there are limitations of commercially available mobile devices and handsets to connect to the network.

Options for people in remote and rural areas to boost their connections to the telecommunications network with a subsidy through the program to purchase technologies such as a cell-fi antenna either for their home or a vehicle is likely to receive strong community support.

Council's understanding is these technologies can support connections for devices that are within an estimated 100 meters of the aerials, meaning one device can provide coverage for multiple users. Therefore opportunities to host small cell devices on council and community buildings would also be welcomed to boost network access for our small towns.

While these technologies are already available, many people in our regional and rural communities are strongly of the view that they should not pay for individual network augmentation when they already pay the same network subscription costs to receive an inferior service than their city counterparts.

Expansion of the program to include grants for businesses and individuals in small communities that have poor access to the network to install technologies such as small cell technologies to improve their capacity to connect to the network is an important inclusion that will address community need where funding has previously not been available.

3. major regional and remote transport corridors.

Council agrees with the proposed program eligibility focus to prioritise transport corridors that deliver recognised economic and social benefits to the community.



However, the suggestion that this would be restricted to target transport corridors defined in the Australian Government's Roads of Strategic Importance initiative is not supported.

The Western Highway is part of the national highway network between Melbourne and Adelaide, with a 50 km section from the outskirts of Great Western to Dadswells Bridge cutting through the municipality.

The Western Highway is currently being duplicated from Ballarat to Stawell. Following completion of the project, Stawell will become the first highway town on the journey from Melbourne to Adelaide. Situated 2 ½ hours into the journey, Stawell will become the major gateway hub to the region.

This freight corridor is vital to the region's economy, with more than 1,500 trucks using the highway west of Ballarat each day, and 2.3 million visitors travelling by road to the Grampians in the year ending December 2019.

Terribly, each year brings news of tragedy with reports of horrific fatalities and serious injury accidents on the highway. While road safety improvements are the most critical to enhance local productivity and protect the lives of motorists travelling on the highway, this section of the highway also features a number of major mobile black spots.

It is therefore critical that this component of the program provides eligibility for projects on all national highways and is not limited to transport corridors as defined in the Roads of Strategic Importance initiative.

Question 2 *Are there any comments on the types of proposals that would be eligible for funding, including the required coverage outcomes?*

Notwithstanding the concerns raised above about the limitations of the criteria for the selection of eligible transport corridors, the required coverage outcomes are sensible as a minimum to provide 4G coverage with 3G forecast to be decommissioned in the near future.

4. Promoting Competition Outcomes

Changes to mobile roaming network regulations have been raised with Council by providers who have stated that sharing of the network to increase competition will have the reverse result of its intention of providing more choice for regional customers.

While Council does not have the expertise to evaluate this view, it should be carefully considered in the design of the program and any changes to regulations should consider this concern. Especially if the co-location and sharing of infrastructure among mobile network operators would reduce any incentive for investment in new infrastructure due to the commercial sensibility of reducing the value and return on their investment.

Suggestions for the program to include incentives to make such reforms more attractive to mobile network operators may address this concern.

Question 3 *Is the RAN model an effective sharing model for Australia?*

A Radio Access Network model does provide clear benefits in delivering a cost effective improvement in coverage to the network. Northern Grampians Shire Council operates a number of council-run and community buildings at all points across the Shire.



As our main town hall in Stawell is serviced via a fibre network connection, Council has installed radio transmitters in each of its buildings to transmit its internet signal to all other Council facilities over a UHF radio network.

This enables all Council facilities to be connected to stable reliable internet in all parts of the Shire, with the signal transmitted over 70 kms between our main offices in Stawell to our offices in St Arnaud.

While download speeds are significantly slower over the radio network, it does provide stable internet to council owned and operated facilities where it would otherwise not be available. Therefore, we believe this could be a viable solution in areas of poor coverage where alternative solutions are not available.

Question 4 *What other design options could be considered that provide multi-provider outcomes?*

The discussion paper proposes infrastructure sharing models with complementary services utilising telecommunications infrastructure, citing examples such as co-location of fixed wireless NBN infrastructure and collaboration among providers to deliver the Victorian Regional Rail Connectivity Project, whereby providers form partnerships on a targeted priority area. These appear to be sensible examples to achieve multi-provider outcomes.

5. Funding is available for the capital costs of proposed solutions with funding recipients and some ongoing costs

As mentioned above in response to question 1. Costs for construction of a cellular tower are estimated to be in the range of \$800,000-\$1,000,000 and significantly more in remote or hard to access areas.

Given the limited return on investment for mobile network operators; the funding cap of \$500,000 per project under previous program rounds; and no funding to contribute to maintenance costs for the operational life of the infrastructure; this is an obvious limitation of previous funding rounds in attracting investment to improve coverage in remote areas of low population density.

Question 5 *Are there any comments on the funding cap for Round 5A and eligible costs?*

It's pleasing that the discussion paper has somewhat acknowledged this issue, but further consideration must be given to consider proposals outside of the funding cap under the program guidelines, whereby the grant contribution will otherwise be insufficient to deliver viable infrastructure improvements in areas where the ability for users to connect to the network is poor.

6. Funding is available for mobile network operators, and for mobile infrastructure providers with priority given to solutions offering services from at least two mobile network operators

Question 6 *Are there any comments that you wish to make in relation to eligibility to apply for funding?*



As mentioned above, concern has been raised with Council by mobile network operators about commercial sensibilities that could reduce the value of their investment if they are required to share network infrastructure. It has been put that this may limit the return on investment, and with margins already small in remote areas of low population density, and therefore such moves would be a disincentive to attract investment to build new infrastructure, unless costs and benefits were met and shared equally.

7. Support for state government and third party co-contributions

While responsibility for the management, regulation and delivery of telecommunications services has historically sat with the Australian Government, all previous rounds of the Mobile Black Spot Program have been extremely effective in leveraging additional investment from state governments and telecommunications providers to augment the substantial funding provided by the Commonwealth.

This has made it possible to fast-track essential infrastructure and to ensure regional communities gain access to the services they deserve where they were previously poor.

Question 7 *Are there any comments that you wish to make regarding ways the program could assist potential state government and third party co-contributors?*

Council believes the current model has worked well, though consideration must be given not to limit funding available for specific projects that would be excluded due to the total project cost exceeding the available funding cap and being assessed against the cost over coverage formula used by the assessment process in previous program rounds.

Co-contributions should enhance the prospects of projects that were previously unviable due to limitations of funding and not because they reduce the maximum funding contribution made by the Commonwealth toward individual projects.

8. Mobile Services need to be provided for a minimum period after Asset Completion

Question 8 *Are there any comments regarding the need for a shorter minimum operational period, particularly in remote and very remote areas?*

The requirement under previous program rounds to provide services for a minimum of 10 years after the asset has become operational should be maintained.

Question 9 *Are there any comments on the proposed equivalency requirement and 4G reference power levels for handheld and external antenna coverage?*

With the forecast decommissioning of 3G services by the majority of mobile network operators in the early part of the current decade, Council would support a requirement that any new emerging technologies that replace existing technologies must deliver coverage over an equivalent area.



9. Other design principles

Tourism is a major driver of our region's economy. A series of iconic events create significant peaks in visitation that underpin the economic return for many tourism operators over the entire year.

The Easter long weekend is one of the most significant annual drivers of visitor numbers to the region. This is associated with the iconic Stawell Gift and a series of nature based tourism events on offer in Halls Gap over this period.

Technology disruptors can be a major impediment to the local economy in these peak visitation periods. Over the 2019 Easter long weekend, a two day mobile phone tower outage in Halls Gap and a bank ATM outage in Stawell, resulted in many small businesses and stall holders expressing their frustration to Council on the impact this had on their ability to process EFTPOS and cash transactions.

Question 10 *What criteria should be used to identify key sites where independent power systems or redundant backhaul could be funded?*

This should be strongly considered in areas without alternative communications options, where people are reliant on the mobile telecommunications network for business transactions and emergency warnings.

Question 11 *Are there any comments regarding the requirement for at least 12 hours of auxiliary backup power for small cells?*

Solutions to deploy backup power solutions as proposed in the discussion paper would receive significant support from all of the stakeholders affected in the example described above.

10. Proposed assessment criteria

Question 12 *Do you have any comments on the proposed assessment criteria?*

Council strongly supports maintaining an assessment criteria that prioritises projects that support new coverage outcomes. Including an assessment of the cost and overall value for money in evaluating the coverage benefit of each application. This is a worthwhile objective to ensure the program is appropriately targeted and delivers the maximum benefit. As noted previously, any such criteria should not be so inflexible that projects that will deliver substantial benefits to areas of low population density or projects that have increased costs due to hard to access areas for the location of suitable infrastructure would be excluded from eligibility.

11. Conclusion

Northern Grampians Shire Council has welcomed the opportunity to share its thoughts on the best way to design the next round of the Mobile Black Spot Program. Stakeholder feedback will ensure the program criteria addresses remaining areas that still have a significant need to receive improved access to the telecommunications network.



The investment which the Australian Government has delivered to date through the Mobile Black Spot Program, has already transformed the telecommunications network in many parts of regional and rural Australia.

Recent changes in the working environment for many Australians as a result of COVID-19 has created additional demands on the network as more people than ever are working from home. This rapid transition has quickly built capacity and innovation in workplaces, in education and in public health, highlighting the significant opportunities that a world class telecommunications network in the regions can provide.

The Government's continued commitment, expansion and refinement of the program will ensure regional Australia can embrace those opportunities.

For further information please contact: Mr Damien Wieland, Head of Government Partnerships, Northern Grampians Shire Council. [\[personal information removed\]](#)

