



26 June 2020

Mobile Black Spot Program Round 5A consultation
Department of Infrastructure, Transport, Regional Development and Communications
GPO Box 2154
CANBERRA ACT 2601

Via email: MBSPRound5@communications.gov.au

To whom it may concern,

Re. Consultation on design options for Round 5A of the Mobile Black Spot Program

The Regional, Rural and Remote Communications Coalition (RRRCC) welcomes the opportunity to provide a submission to the Department of Infrastructure, Transport, Regional Development and Communications' consultation on design options for Round 5A of the Mobile Black Spot Program (MBSP).

The RRRCC is an alliance of 21 volunteer and advocacy organisations with a shared interest in improving telecommunications in the bush. The Coalition was formed in 2016 to raise awareness of the important role of connectivity for regional, rural and remote Australians and to advocate for continued improvements. The RRRCC's advocacy efforts are focused on five high-level goals, under which we have articulated a number of specific asks. The RRRCC's five goals are:

1. Guaranteed access to voice and data services.
2. Equitable voice and data services that meet minimum standards and reliability.
3. Continued program to expand mobile coverage.
4. Digital capacity building for regional, rural and remote Australia.
5. Affordable communications services for regional, rural and remote Australia.

The RRRCC has strongly supported the MBSP since the Coalition was first formed, and we recognise the significant impact that MBSP investment has had in improving mobile coverage in regional, rural and remote areas. This makes a material difference to the lives of those who live and work in – and visit or travel through – these areas. Despite this investment, many regional and remote Australians are still unable to access reliable mobile coverage. The RRRCC has consistently called for ongoing financial commitment to the program, and welcomed the government's commitment in 2019 to \$160 million for Round 5 and Round 6.

One of the RRRCC's core asks is for the MBSP to promote competition as well as coverage by requiring open access for all networks, and this remains relevant in the context of the design of Round 5A. The RRRCC has also expressed the need for the program design to evolve, as potential sites become more commercially marginal, and to account for technological change. To these ends, the RRRCC welcomes the government's commitment to seek stakeholder views to inform the design of Round 5A. The time is right for the MBSP to look at new ways of delivering coverage.

Following consideration of the discussion paper and discussions with the department, the RRRCC provides the following comments. These points relate to the questions posed in the paper, along with broader observations on the program.

1. Delivering coverage benefits for non-commercial regional and remote areas

Q1. Are there any comments on the coverage areas proposed to be targeted?

Q2. Are there any comments on the types of proposals that would be eligible for funding, including the required coverage outcomes?

The rollout of the MBSP has significantly improved telecommunications in regional and remote Australia, and the RRRCC strongly support the program maintaining this essential focus. Past rounds have been successful when designed to target specific coverage issues or priority locations. The RRRCC is broadly supportive of the three priority areas that have been identified for focus in Round 5A, namely:

- a. high priority natural disaster-prone areas including those affected or prone to bushfire
- b. new technology solutions in areas where low population densities have discouraged applications under earlier rounds
- c. major regional and remote transport corridors.

a. High priority natural disaster-prone areas including those affected by or prone to bushfire

The RRRCC support one of the MBSP focus areas encompassing natural-disaster prone areas, including bushfire prone or affected areas, flood prone areas, emergency disaster coordination zones, rural and regional emergency service premises and evacuation and assembly points. Consideration should also be given to areas prone to cyclones or severe storms.

The discussion paper doesn't make clear how natural disaster-prone areas will be defined or geographically delineated, or acknowledge the inherent complexity in this task. The RRRCC understands that a letter of endorsement from a state or territory government, local council or emergency service organisation will be used to verify locations that are 'natural disaster-prone'. Without establishing some further parameters to define these areas, it will be difficult to ensure a consistent approach. It will also be important to clearly define which natural disasters are in scope – i.e. those that have potential to create an immediate risk to human safety

and impact physical infrastructure. This would include severe storms and cyclones, in addition to floods and bushfires. It would not include drought.

The 2019-20 bushfires that ravaged much of Eastern Australia over three months highlighted the essential role telecommunications services play during a crisis, supporting community safety and cohesion, and the delivery of emergency response functions. Over 700 telecommunications infrastructure sites were affected, various sites inoperative for days at a time, and interruptions felt for weeks after the fires. These occurrences isolated community members from emergency warning systems, inhibited the ability of firefighters and emergency response personnel to communicate, shut down reliant technologies such as EFTPOS capabilities for purchasing essential goods, and cut communities off from loved ones.

As the department is aware, flood events can also have serious impacts on telecommunications infrastructure and services. Building resilience into these services is important, as is the establishment of reliable telecommunications infrastructure in flood and cyclone prone areas. This gives communities the ability to communicate and coordinate during disasters, and during recovery.

The RRRCC support the department's proposed approach, which recognises the necessity of mobile coverage in natural disaster-prone areas for both the community and for emergency responders. It is encouraging to see a number of bushfire affected areas covered by the recently announced Round 5 of the MBSP, and allocation of \$10 million from the program to fund longer-lasting backup power sources for mobile base stations built under rounds one and two.

The RRRCC suggest that Round 5A funding of solutions in natural disaster-prone areas should include additional requirements for longer-lasting backup power. The experiences of the 2019-20 bushfire season demonstrated that current arrangements for backup power supply are inadequate. The department should re-evaluate the requirements for power supply for all mobile towers, increasing the capabilities of a tower to remain functioning for an extended period of time, in addition to extra backup allocation to those in high-risk areas.

The RRRCC believe there is also benefit in expanding funding eligibility to include boosters, repeaters and other equipment that can be used to extend coverage and support connections in natural disaster-prone or affected areas.

Recommendations

1. Consideration should be given to developing parameters to delineate natural disaster-prone areas, to provide clarity and ensure a consistent approach is taken by applicants.
2. Natural disasters that are in scope should be clearly defined, and should include severe storms or cyclones.
3. Solutions funded in natural disaster-prone areas should have additional requirements for longer-lasting backup power.

4. The MBSP Round 5A should be expanded to include boosters, repeaters and other equipment that can be used to extend coverage and support connectivity in disaster prone areas, and potentially in areas of low population density.

b. New technology solutions in areas where low population densities have discouraged applications under earlier rounds

The RRRCC strongly supports the department's proposal to prioritise new technology solutions in areas of low population density. It has become apparent in recent rounds of the MBSP that the lack of economic incentive for MNOs to build infrastructure and provide services to areas of low population density is limiting participation in the program. As many of the commercially viable locations have been taken up in earlier rounds of the program, it has now reached a point of plateau. The department must be able to appropriately incentivise solutions targeting these low population density areas, lowering the risk of a drop off in MNO involvement and ensuring the needs of consumers in these areas are not overlooked.

As the discussion paper notes, lower density areas are frequently awarded solutions utilising small cells. While small cells have an important role to play, the RRRCC supports prioritisation of new and innovative methods of delivering mobile service in these less populated areas. New technology solutions must have been trialled and proven to work in an appropriate environment. This funding should not be allocated for a technology trial but should be used to expand a proven solution.

While small cells are beneficial to those in the immediate areas they service, due to their small footprint they often leave many people in proximity without improved service. They should not be used as a cheaper alternative to improving service by a macro tower which would benefit a larger number of people and cover a much larger area. Further, people in areas that have been awarded small cells are concerned that they will now never be eligible for funding for a macro site because they have been awarded a small cell through the MBSP.

The RRRCC supports the use of the Australian Bureau of Statistics' remoteness structure¹ to identify the remote and very remote locations that would be targeted through this part of the program. It should be noted that some areas that fall within the 'outer regional Australia' category may also be relevant (i.e. low population and high cost for mobile solutions), and consideration should be given to how applicants could present a case for funding locations in these areas.

¹ Referring to the 2016 Australian Bureau of Statistics remoteness structure map available at <https://www.abs.gov.au/websitedbs/d3310114.nsf/home/remoteness+structure>

Recommendation

5. The program should incentivise quality solutions – including proven new technologies – that service the maximum number of people and largest area with high quality coverage.

c. Major regional and remote transport corridors

The RRRCC recognise the lack of coverage along transport corridors as a significant issue and support the department’s proposal to directly address this. MNOs have often shied away from transport corridors due to the lower economic value of providing a service along a route compared to a settled area or gathering spot. However, the importance of coverage along transport corridors is well established, and improving coverage is an agreed priority of governments through the National Freight and Supply Chain Strategy Action Plan. There are a range of benefits that will accrue from improved coverage along transport corridors – including safety and access to emergency assistance, more efficient freight operations, encouraging regional tourism and connecting regional communities. The MBSP presents a great opportunity for government to incentivise MNOs to invest in and improve coverage on these regional and remote transport corridors.

An important component of improved freight efficiency is through the implementation of new technologies such as telematics. Telematics is a system used by individuals, truck transporters and entire fleet systems that combines telecommunications and information technology. These systems provide a wide range of real-time data on vehicle tracking, reporting, safety alerts, speed monitoring and maintenance reports. Telematics is widely recognised to reduce administrative burden, improve planning, investment decision making, asset maintenance and the ability to monitor driver may lead to more efficient, safe, and well-targeted outcomes. Limitation of the technology is cost, and a lack of consistent mobile coverage required for real-time reporting.

The RRRCC support the department’s priority for transport corridors and reinforce the importance that preference is given to solutions that cover an entire corridor – where practical – as well as providing coverage to communities in the corridor, or major stopping points, be that truck stops, community facilities or tourist landmarks. The department proposes that Round 5A would target transport corridors defined in the Roads of Strategic Importance initiative and National Land Transport Network. Consideration should also be given to utilising the CSIRO TraNSIT tool², which models key transport routes for a large number agricultural commodities and was used to inform the Roads of Strategic Importance program.

Using the TraNSIT model would help to capture the smaller regional towns and tourism centres and key routes for movement of agricultural goods, that are not captured in the Roads of Strategic Importance or National Land Transport Network, but where mobile coverage would provide considerable benefit to regional

² <https://www.csiro.au/en/Research/LWF/Areas/Landscapes/Transport-logistics-TRANSIT>

consumers. As an example, in Queensland the Gulf Developmental Road and Burke Developmental Road are not Roads of Strategic Importance, but are significant transport corridors for primary industries.

Recommendation

6. The department should utilise tools such as the CSIRO TraNSIT model to inform the identification of regional and remote transport corridors that are in scope for the program, to help ensure that important corridors for movement of agricultural goods and smaller regional towns and tourism centres are captured.

2. Promoting competition outcomes

The RRRCC's view is that greater competition in mobile service delivery is of immense benefit to regional, rural and remote consumers. Ideally the MBSP Round 5A design would create the appropriate competition settings for an increase in the number of MNOs operating within the existing mobile coverage footprint, while at the same time incentivising expansion of the coverage footprint. Encouraging co-location is an important part of this. As the discussion paper suggests, the MBSP has for its previous rounds encouraged competition by encouraging co-location on base stations. There is room for improvement in the uptake of co-location.

The RRRCC support the key design points for encouraging co-location. The RRRCC's position is that solutions that provide coverage from more than one MNO must be weighted higher than those with a sole MNO occupant.

Similarly, priority should be given to solutions providing complementary services such as fixed wireless broadband. This approach aligns with the RRRCC goals and provides more choice for regional consumers. The RRRCC strongly supports the 'multi-use' tower strategy, as adopted by Field Solutions Group (in collaboration with Optus) in the solutions awarded funding under MBSP Round 5. By providing a range of connectivity options, this approach enhances the benefits available to regional consumers. The RRRCC encourages the department to consider how to best incentivise these sorts of approaches in Round 5A.

Recommendations

7. Solutions that provide coverage from more than one MNO should be weighted higher than those with a sole MNO occupant.
8. Multi-use tower approaches – such as that employed by Field Solutions Group and Optus in Round 5 – should be incentivised.

Q3. Is the RAN model an effective sharing model for Australia?

Q4. What other design options could be considered that provide multi-provider outcomes?

The proposed RAN sharing model has potential to support collaboration between MNOs who are proposing to roll out the same technology. The RRRCC understand that with a RAN sharing model, due to the specific infrastructure being shared, the MNOs involved would have to agree to use the same technology, as well as agree each time there is an update of services. For example, if one MNO in the agreement would like to upgrade to include 5G services, the other MNO would have to have this technology on offer, and agree to deploy it at the same time. This may limit MNOs with how they can progress their services – and in some cases mean that base stations are not prioritised for upgrades because of the need to coordinate and reach agreement between multiple MNOs. To overcome this possible limitation, the RRRCC suggest the department does not limit the funding to just active RAN sharing models, but take into consideration different sharing models or approaches. An outcomes-based approach should be taken when considering the co-location and competition plan for each application.

Recommendation

9. Round 5A should encourage a range of options supporting multi-provider outcomes, including – but not limited to – RAN sharing, as well as other ‘active’ infrastructure options. An outcomes-based approach should be adopted when assessing proposals.

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

Q5. Are there any comments on the funding cap for Round 5A and eligible costs?

The RRRCC supports the department’s justification to increase the program’s funding cap where solutions require multiple base stations. Previous rounds of the MBSP have been appropriately funded at the current cap. With the department’s likely allocation of a significant proportion of funding to solutions targeting major regional transport corridors, it is important MNOs are financially incentivised to take on larger, multi-base station projects.

Rather than a general increase in funding caps, any increases should be specific to the priority area being targeted by the program. Any adjustment in the funding cap should ideally be informed by analysis that examines the costs of deploying multi-base station solutions and the likely return on investment for MNOs as well as the benefits to communities and visitors. More isolated areas are likely to be financially unviable for MNOs to invest, but offer substantial benefits to consumers. In these cases, there will need to be a greater contribution from government.

The RRRCC would support additional funding for recipients to capitalise the costs of leased optical fibre and microwave backhaul, in addition to satellite backhaul. The costs of backhaul can be significant, and including some of these costs in the program scope is expected to help incentivise ongoing MNO participation in the program, particularly for delivering solutions in remote and very remote areas. A decision on how this is incorporated into program design should be informed by the department's experience with the MNO response to Round 5 – which allowed MNOs to capitalise the costs of satellite backhaul over a 10-year period.

The RRRCC would also support funding for consumer purchases network extension devices, antennae and legitimate signal boosters. These devices come at a significant and possibly prohibitive cost for individual consumers, but make a material difference to coverage and may be a practical option for the program to extend coverage in some areas.

Recommendations

10. Increases to the funding caps should be specific to the three priority areas under Round 5A, and be informed by the financial viability of proposed multi-base station solutions as well as the benefits likely to accrue to local communities and visitors.
11. Round 5A should include the ability for applicants to capitalise the costs of leased optical fibre and microwave backhaul, as well as satellite backhaul.
12. Eligibility should be extended to consumer purchases of approved network extension devices, particularly in areas of low population.

4. 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

Q6. Are there any comments that you wish to make in relation to eligibility to apply for funding?

Inclusion of both MNOs and mobile network infrastructure providers (who have an agreement with at least two MNOs) in the eligibility for funding is important, and should support competition by better enabling a variety of MNOs – including smaller MNOs – to build their presence in regional Australia.

The RRRCC strongly supports priority given to solutions offering services from at least two MNOs. As mentioned previously, a MBSP that promotes competition, as well as coverage, is one of the RRRCCs major asks. It is important the department, through all levels of the program, encourage and incentivise a variety of MNO participation within the current coverage footprint, and in new areas.

Recommendation

13. Priority should be given to solutions that offer services from at least two mobile network operators.

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

Q7. Are there any comments that you wish to make regarding ways the program could assist potential state government and third-party co-contributors?

To maximise the benefits of public and private investment in mobile networks, the Commonwealth should work with state and territory governments to ensure that as far as possible spending programs are complementary rather than duplicative. State and federal programs should also be better aligned so that both promote competition outcomes. Funding programs available at a state level can be significant (such as the \$400 million NSW Regional Digital Connectivity Program), and there is great opportunity to ensure these programs complement the MBSP and enhance outcomes for regional consumers.

Consideration could also be given to how the Commonwealth can help to facilitate partnerships and co-investment from state governments and third parties. This could include establishing a function that allows priority locations and solutions to be put forward – building on what has been done in previous rounds of the program.

Some communities may not have the resources needed to liaise with program applicants effectively, or have access to funds to contribute. These communities will need assistance to engage – for example to fund consultants to engage on their behalf. The government should consider including assisting these communities as part of the program funding envelope to ensure a collaborative approach that delivers mobile infrastructure where it's needed.

Recommendations

14. The Commonwealth should work with state and territory governments to ensure regional connectivity spending programs are complementary rather than duplicative, and maximise the coverage and competition outcomes for regional consumers.
15. Consideration should be given to how the Commonwealth can facilitate partnerships and co-investment, including by enabling the nomination of priority locations or solutions, building on previous MBSP rounds.
16. Consideration should be given to how the program can provide financial assistance to communities to engage with program applicants, to ensure a collaborative approach that delivers solutions where they're needed.

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

Q8. Are there any comments regarding the need for a shorter minimum operational period, particularly in remote and very remote areas?

The RRRCC understands that technology and market conditions can change quickly in the telecommunications industry, and that this affects the investment outlook for MNOs and infrastructure providers. However, from a consumer perspective, a 10-year minimum operational period is critical. This provides certainty to those consumers who will be using and relying on the service, and should in turn encourage the delivery of solutions that are robust.

Flexibility is important, so that providers aren't locked in to providing outdated technology, or prevented from upgrading the solution during the minimum 10-year operational period. Consistent with the program requirements for previous rounds, this flexibility should not interfere with coverage and service requirements.

The proposal that Round 5A allow MNOs to capitalise the cost of leased optical fibre, microwave and satellite backhaul over a 10-year period should provide further incentive for MNOs to commit to a minimum operational period of 10 years.

Recommendation

17. There should be no change to the 10-year minimum operational period requirement.

Q9. Are there any comments on the proposed equivalency requirement and 4G reference power levels for handheld and external antenna coverage?

The RRRCC supports the proposed equivalency requirement and the minimum 4G requirement with 3G service delivery becoming optional. The RRRCC understands that the decision by Telstra to switch off 3G services by 2024 to open up bandwidth for 5G meant that Telstra was not eligible for funding for macro cell towers in Round 5. Given that other carriers are also likely to transition away from 3G services during the proposed operational period of Round 5A, it is important that Round 5A establish a new minimum service requirement.

Many regional and remote consumers rely heavily on the 3G service and may be using 3G-only devices. The RRRCC seeks assurance that any solutions that propose to 'switch off' 3G services not only provide equivalent 4G services but also provide adequate lead-times and notice for consumers within the 3G footprint to transition.

Recommendation

18. MBSP Round 5A should include a requirement that solutions proposing to 'switch off' 3G services not only provide equivalent 4G services but also provide adequate lead-times and notice for consumers within the 3G footprint to transition.

7. Other design principles

Q10. What criteria should be used to identify key sites where independent power systems or redundant backhaul could be funded?

Q11. Are there any comments regarding the requirement for at least 12 hours of auxiliary backup power for small cells?

As noted earlier in this submission, the RRRCC is supportive of a Round 5A focus on improving network resilience and more specifically backup power. The summer 2019-20 bushfire season revealed significant limitations in mobile tower ability to run for extended time periods on backup power.

The RRRCC welcomes a focus on extended backup power resilience. For solutions in natural disaster-prone areas, new and innovative solutions with the ability to operate independently from the power grid should be given priority – including renewable technologies such as solar power. If cost-effective, natural disaster-prone areas would benefit immensely from solutions that are able to function indefinitely off the grid. If this is a viable solution, it is essential that the MBSP award these options the funding allocation.

Proposed assessment criteria

Q12. Do you have any comments on the proposed assessment criteria?

Expansion of mobile coverage that promotes competition is critical in regional and rural areas. After five rounds of the MBSP, there remain premises, vital community hubs and high traffic areas with no mobile coverage. It is important that the department and MNOs have an accurate and up to date picture of on-ground mobile coverage, and community views on black spot priorities. RRRCC member organisations would welcome the opportunity to nominate further black spot locations to the National Mobile Black Spot Database, which closed in late 2018.

The RRRCC would also support further work on mobile coverage maps to verify that they accurately reflect user experience, particularly on the ‘fringes’ of mapped coverage areas. This would assist with targeting MBSP investment. Working towards consolidated and independent coverage maps across Australia would also provide consumers with insight on the best options available to them. RRRCC member organisations have expressed a willingness to work with telecommunications providers and government on this, for example by providing on-ground examples of user experience that may not reflect the mapped coverage.

Recommendations

19. The department should re-open the National Mobile Black Spot Database, to allow nomination of additional black spots.
20. To help ensure that mobile coverage maps are up to date and accurate, where appropriate MNOs and government should work with regional consumers to ground-truth mapping with on-ground experiences.

The RRRCC welcomes the government’s investment in the MBSP, and recognises the impact previous rounds of the program have had. It is important that Round 5A, and future rounds of the program are designed in a way that achieves the best outcome for regional rural and remote Australians.

The RRRCC would be happy to provide the department with further information about the recommendations put forward in this submission, or to discuss the needs of regional, rural and remote telecommunications customers in more detail.

Thank you again for the opportunity to provide a submission. Should you require any further information, please contact Adrienne Ryan, General Manager Rural Affairs at the National Farmers’ Federation, on 02 6269 5666 or aryan@nff.org.au.

Yours sincerely,

The Regional, Rural and Remote Communications Coalition

