![Australian Government — Department of Infrastructure, Transport, Regional Development, Communications and the Arts]

National Regional Roads Australia Mobile Program

Consultation Paper

March 2025

Make your views known

The Department of Infrastructure, Transport, Regional Development, Communications and the Arts (the department) invites comments from interested parties on the National Regional Roads Australia Mobile Program (National RRAMP), with the submission period closing on Friday, 30 May 2025. Submissions received by the department as part of this consultation process will be used to inform the development of Program Guidelines for the National RRAMP.

Making a submission

The department seeks written comments and submissions on the matters outlined in this paper. Comments and submissions must be received by 5:00pm AEST on Friday, 30 May 2025.

You can make an online submission at infrastructure.gov.au/have-your-say.

You can send submissions via mail to:

> Director, Mobile Investments – Roads & Resilience
> Communications Services & Consumer Division
> Department of Infrastructure, Transport, Regional Development, Communications and the Arts
> GPO Box 594
> CANBERRA, ACT 2601

If you have any questions, please email MobileCoverageRoads@infrastructure.gov.au.

Publication of submissions and confidentiality

All submissions will be made publicly available by the department unless a respondent specifically requests that a submission, or part of a submission, be kept confidential. Comments will not be published.

The department reserves the right not to publish any submission, or part of a submission, which in its view contains potentially offensive or defamatory material, or for confidentiality reasons.

The department is subject to the *Freedom of Information Act 1982* and comments and submissions may be required to be disclosed by the department in response to requests made under that Act.

Contents

1. Introduction

Background

The Regional Roads Australia Mobile Program (RRAMP) is an Australian Government initiative to improve multi-carrier mobile coverage on highways and major roads in regional and remote Australia.

This paper discusses the National RRAMP, which is being funded and delivered by the Australian Government. It complements the Government's investment of $50 million in the RRAMP Pilot Programs, which are being delivered by state and territory governments.

Industry, state, territory and local government, and community feedback is sought on the proposed design for the National RRAMP, which is expected to open for applications in late 2025.

Program objectives

The RRAMP provides grant funding to increase multi-carrier mobile coverage on regional highways and major roads to improve safety, strengthen economic growth, improve social connectivity, and support regional development. Outcomes from the RRAMP are:

- investment in construction of new infrastructure and upgrades to existing infrastructure to deliver new or improved multi-carrier mobile coverage;

- increased mobile connectivity and coverage in regional and remote areas, along highways and major roads, and at strategic locations; and

- improved road safety, liveability and equality for regions.

Pilot Programs

The Australian Government is providing $50 million nationally to state and territory governments to deliver RRAMP Pilot Programs which test innovative and novel solutions to increase mobile telecommunications coverage on regional highways and major roads in their jurisdiction. The RRAMP Pilot Programs also allow each state and territory to tailor solutions that meet their own needs and priorities. The Pilot Programs will preference multi-carrier coverage.

This joint initiative was a key outcome of the first Regional Connectivity Ministers Roundtable in August 2023, where state and territory ministers agreed to partner with the Government to deliver improved mobile connectivity on major roads.

Further information about announced RRAMP Pilot Programs can be found at www.infrastructure.gov.au/rramp.

Proposals for the RRAMP Pilot Programs have informed this paper and the proposed design of the National RRAMP.

Better Connectivity Plan for Regional and Rural Australia

Funding for the RRAMP is part of the Government's $1.1 billion *Better Connectivity Plan for Regional and Rural Australia* (Better Connectivity Plan). The Government's October 2022 Budget provided $656 million for the Better Connectivity Plan to improve mobile and broadband connectivity and resilience in rural and regional Australia, including funding to boost multi-carrier mobile coverage on regional roads.

Further information about the measures funded through the Better Connectivity Plan can be found at www.infrastructure.gov.au/bcp.

National Program

The National RRAMP will provide grant funding to increase multi-carrier mobile coverage on regional and remote highways and major roads across Australia.

Australians consider telecommunications to be a vital service, and increasingly expect to access telecommunications services while travelling. Highways and major roads in regional and remote Australia are well-used by local communities, travellers and the freight industry. Regional and remote Australia is also overrepresented in road accident and fatality statistics.

However, investment in communications infrastructure on road networks in regional and remote Australia often yields little commercial return and results in a small number of new customers for mobile carriers. The limited commercial drivers, high cost of infrastructure and low return on investment can be barriers to investment in new mobile coverage along regional roads and highways, particularly where some coverage is already provided by a competitor.

The National RRAMP will fund projects which deliver multi-carrier mobile coverage at key points on targeted highways and major roads in regional and remote Australia. It will deliver more connectivity on regional highways and roads, improving safety, strengthening economic growth, improving social connectivity, and supporting regional development.

The National RRAMP will complement the Government's commitment to the Universal Outdoor Mobile Obligation (UOMO). Where UOMO will work to ensure new competitive outdoor mobile coverage for SMS and voice and expand Triple Zero access across Australia, the National RRAMP will fund improvements in terrestrial, multi-carrier mobile coverage at strategic locations and, importantly, provide opportunities for higher quality and capacity in these locations.

2. Summary of proposed design features

Criteria	Eligibility
Applicants	National Mobile Network Operators (MNOs); or Mobile Network Infrastructure Providers (MNIPs).
Locations	On a regional or remote highway or major road specified by the Government; and At or providing coverage to a Strategic Location identified by the Government or proposed by the applicant.
Infrastructure	New base stations (macro cells or small cells); or Upgrades to, or installation work on, an existing site (capacity, backhaul, hut, radio equipment, power). It may include funding for Wi-Fi hotspots.
Multi-carrier	Successful projects must provide for new or improved multi-carrier coverage to the area, including through active or passive sharing. Active sharing projects with all three national MNOs (Optus, Telstra and TPG Telecom) will be prioritised. Applications must include a written commitment to use the infrastructure from at least: • one other national MNO where the infrastructure is owned by a national MNO; or • two national MNOs where the infrastructure is owned by an MNIP.
Grant Funding	Two options are proposed: • Option 1 – Government provides grant funding for 100% of the eligible capital costs; • Option 2 – Tiered grant funding, with projects delivering active sharing attracting a higher contribution to eligible capital costs. Both options may include an additional incentive to MNOs of 50% of operating costs for five years, where another provider is given access.
Operating Requirements	Operate and provide coverage from all committed MNOs for 10 years. Meet minimum resilience requirements, such as at least 12 hours of back-up power for macro cells.

3.Design features of the National RRAMP

This section provides further detail about the proposed design features of the National RRAMP, and poses questions to stimulate discussion and guide responses from stakeholders. It does not represent the final content of the Program Guidelines.

> **THRESHOLD QUESTIONS:**
>
> **?** **What is the need for terrestrial mobile coverage on regional and remote highways and major roads in the medium- and long-term?**
>
> **?** **To what extent will Low-Earth-Orbit Satellites (LEOSats) and direct-to-device (D2D) technology meet this need over the medium- and long-term?**
>
> **?** **To what extent will coverage at locations proposed under the National RRAMP support existing customers, or attract new customers, for MNOs?**
>
> **?** **Is there merit in the National RRAMP also funding Wi-Fi hotspots at strategic locations along highways and major roads (as per Recommendation 2 of the *2024 Regional Telecommunications Review Report*)?**
>
> **?** **How can the Government best preference and prioritise active sharing through the design of the National RRAMP?**

New base stations or upgrades

Eligible activities are proposed to include the construction of new infrastructure, or upgrades to existing infrastructure, to deliver new or improved multi-carrier mobile coverage.

New infrastructure

Many regional and remote roads do not have mobile coverage, or mobile coverage is patchy or inconsistent. Some coverage may extend from base stations situated in communities. The National RRAMP will fund the construction of base stations that provide new mobile coverage to roads where there currently is no terrestrial coverage.

To deliver the policy objective of the National RRAMP, new infrastructure proposals should include a written commitment from at least two MNOs to provide services from the proposed new infrastructure for at least 10 years. If a new build is selected for funding under the program, further evidence of a binding agreement (such as a commercial contract) is proposed to be required before payments are made under the grant agreement.

Consistent with the Mobile Black Spot Program (MBSP) and Peri-Urban Mobile Program (PUMP), applicants will be required to demonstrate the anticipated coverage outcomes of the proposed new infrastructure and provide estimated costs to inform the assessment of merit and value with relevant money, and the maximum amount to be provided under the grant agreement.

Eligible solutions involving new infrastructure will include macro cell mobile base stations, towers, small cells, microcells, and associated backhaul. New innovative solutions, such as base stations utilising LEOSat backhaul, will be encouraged.

The *2024 Regional Telecommunications Review Report* recommended actions to improve mobile services, including funding new terrestrial mobile coverage for critical areas like roads, and leverage strategically located Wi-Fi hotspots where needed (Recommendation 2).

Upgrades or installations

Some major roads and highways already receive coverage from a single provider, which creates an opportunity to efficiently leverage existing infrastructure to deliver multi-carrier outcomes (without building new infrastructure). As such, grant funding is also proposed for upgrade to existing infrastructure, where at least one additional national MNO agrees to provide services from the site for a 10-year period.

Eligible solutions may include works to strengthen towers, increase backhaul capacity, increase power capacity, or integration costs associated with active sharing of mobile infrastructure. They may also simply be the installation of equipment from a new national MNO. Upgrades that boost the signal strength of existing towers may also be considered. Upgrades must result in more national MNOs providing services from the proposed site.

Applicants will be required to demonstrate the anticipated coverage outcomes of the proposed upgrade or installation and provide estimated costs to inform the assessment of merit and value with relevant money, and the maximum amount to be provided under the grant agreement. Usage statistics (for example, connections, calls and Triple Zero calls made over the most recent 12 months) on the site proposed for upgrade may be requested to provide a baseline for evaluation of the project.

Sites that are subject to the Multi-Operator Core Network sharing arrangement (MOCN deal) between Optus and TPG will not be eligible for grant funding through the National RRAMP, unless they are being upgraded to also provide access to, and coverage from, Telstra.

MNOs may choose to leverage funding for upgrades to sites from an older generation of mobile technology (such as 4G) to a newer generation (such as 5G), as long as these upgrades also result in the delivery of services from an additional carrier from the site.

> **The Government is considering funding upgrades to mobile coverage infrastructure, including radio equipment, installation costs, strengthening towers, increasing power capacity, or integration projects associated with active sharing.**
>
> **? Would these upgrades provide sufficient incentive for national MNOs to share existing infrastructure?**
>
> **? What other kinds activities, infrastructure and costs support active sharing, and may be considered for funding?**
>
> **? Should proposals for new infrastructure providing services from Optus and TPG, that leverage Optus and TPG's MOCN deal, be considered eligible?**
>
> **? Are there market or technical issues that may impact the construction of new mobile coverage infrastructure, or infrastructure upgrades, on highways and major roads in regional and remote areas? If so, what are the impacts?**

Multi-carrier coverage

All projects funded under the National RRAMP must provide new or improved multi-carrier coverage. The technical means to provide multi-carrier coverage will not be specified. Applicants may propose active sharing (such as MOCN or roaming) or passive sharing (such as co-location or joint ventures).

Allowing passive or active sharing under the National RRAMP provides applicants with flexibility to propose competitive solutions at targeted locations. However, given core objectives of the RRAMP are to encourage the market to deliver multi-carrier coverage, provide high quality coverage and increase competition in underserved regional areas, active sharing is expected to better deliver on the objectives and improve value for money. While passive co-location has generally been the norm for shared infrastructure in Australia, the recent MOCN deal between Optus and TPG indicates that there is potential for the market to move towards active sharing to deliver most cost-effective outcomes over the long term in regional Australia.

Entities will be required to work together when preparing their application to deliver multi-carrier coverage. Applications must include a written commitment to use the infrastructure from at least:

- one other national MNO where the infrastructure is owned by a national MNO; and
- two national MNOs where the infrastructure is owned by a MNIP.

Applicants will be required to describe how the proposed project will achieve multi-carrier coverage, and active sharing may be prioritised as an outcome. Active sharing projects with all three national MNOs may also be prioritised.

Feedback from the State and Territory Government Pilot Program proposals and experience with other regional connectivity programs suggests:

- network investment in recent years has focused on resilience and network hardening;
- site acquisition and construction costs have risen;
- there may be challenges in achieving a return on investment for sites in topographically challenging or sparsely populated regions; and
- new technologies have created or exacerbated uncertainty around the medium-term outlook for traditional network investments.

> **?** **How can the Government best facilitate cooperation between national MNOs during the application stage to ensure multi-carrier outcomes are proposed and delivered?**
>
> **?** **What alternatives are there for applicants to demonstrate, to Government, that multi-carrier outcomes will be delivered (as an alternative to sharing commercial agreements)? Any alternative would need to be robust and demonstrate intent.**
>
> **?** **Are there other market or technical issues that may impact the delivery of multi-carrier outcomes?**

Eligible Roads

The department will provide a list of eligible roads for funding under the National RRAMP. These will be selected following analysis of existing coverage, road usage and crashes. State and territory governments will be consulted when determining eligible highways and major roads.

Indicatively, between 20 and 60 roads will be eligible for funding, however not all roads are expected to receive a funding outcome. There will be a number of eligible roads in each state and territory.

The department may provide eligible roads in a mapping format for potential applicants.

Applicants will be required to provide predictive coverage maps with coverage specified in terms of received power at a level determined by the department[1], to provide a baseline for assessing proposals against existing coverage.

> **?** **The National RRAMP aims to provide multi-carrier mobile coverage where currently there is no coverage, or coverage from only one provider. With this in mind:**
>
> **-** **are there any particular roads the Government should consider for eligibility;**
>
> **-** **are there any roads that are not considered viable for investment?**
>
> **?** **Should applicants be permitted to propose solutions on roads that are not on the list of eligible roads, provided a good case can be made (for example, using published data from the National Audit of Mobile Coverage)?**

Strategic Locations

Strategic Locations are points where drivers would logically be expected to stop and use their mobile phone. These may include:

- rest areas and truck stops,
- campgrounds,
- service centres,
- EV charging stations,
- tourist sites (swim holes, viewing platforms), and
- other points of interest.

Eligible projects must be located in or provide coverage to at least one Strategic Location.

The department may provide a database of relevant Strategic Locations for potential applicants; however, applicants may also suggest and make the case for other Strategic Locations.

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[1] i.e. Reference Signal Received Power (RSRP). See for example the RSRP levels considered in the Peri-Urban Mobile Program Round 2 Grant Opportunity Guidelines

? **In addition to the types of locations listed above, are there any other Strategic Locations which could be considered?**

? **Are there any other indicators which can be used to identify a Strategic Location, noting the policy intent of the National RRAMP (for example, distance from a population centre, tourism data, or correspondence from local residents / institutions)?**

Grant Funding

Grant funding is proposed to contribute to the capital costs of the proposed new infrastructure, upgrade, or installation. These may include costs for the tower, antenna, construction or installation costs, radio equipment, power, and backhaul. The proposed financial settings may differ to those offered under other regional communications programs, including the Regional Connectivity Program and the Mobile Black Spot Program. They reflect the different outcomes, objectives and strategic locations for the National RRAMP, and that this is a new program.

There are a number of funding scenarios for discussion:

- Grant funding for 100% of eligible capital costs for all funded projects. Active sharing would be prioritised through the assessment of merit of projects. This option is high cost for the Government, however may also be the most likely to deliver outcomes. It reflects the limited incentive for commercial investment in remote areas.

- Tiered grant funding, which increases the percentage of grant funding according to the number of MNOs delivering services. Industry would be responsible for funding the balance of the cost. Third party co-contributions (for example, from state, territory, or local government) would be favourably considered.
    - Projects that involve all three national MNOs delivering services via active sharing would attract grant funding of 100% of eligible capital costs.
    - Projects that involve two national MNOs delivering services via active sharing would attract grant funding of 75% of eligible capital costs.
    - Projects that involve at least two national MNOs delivering services via passive sharing would attract grant funding of 75% of eligible capital costs.

- Grant funding of 50% of eligible operation costs for five years where an MNO allows another MNO to access its infrastructure (in addition to funding the eligible capital costs). Funding would be determined according to the capitalised net present value of the estimated operational costs.
    - While MNOs are subject to the facilities access regime to provide reasonable access to their infrastructure, it is expected that this additional incentive will encourage more competitive terms, facilitating agreements between carrier entities.
    - This additional incentive would not apply to infrastructure that is owned, or proposed to be owned, by MNIPs. MNIPs generally have a market incentive to provide competitive commercial terms for additional users of their infrastructure to maximise their return on investment.

Other conditions for grant funding

There will be no minimum or maximum grant size, however the funding provided under the grant agreements will be based on cost estimates provided at the time of application.

Conditions for variations to the scope of individual funded projects would be set out in the grant agreements, and may include pro-rata grant payments for reductions in delivered metrics. A change in the number of MNOs delivering services from a funded solution may result in Government funding being reduced or withdrawn.

Eligible solutions must not receive funding through another Government grant program. This includes the RRAMP Pilot Programs being delivered by state and territory governments.

Synergies with other projects, such as roads upgrade projects or connectivity projects, are encouraged. Applicants will be asked to identify any such synergies, and outline any efficiencies that may be achieved. However, the funding must not be duplicative of other Government programs.

Eligible solutions must not be on the forward work programs for MNOs or MNIPs. This includes sites that will deliver services from both TPG and Optus under the MOCN deal.

> **? We are interested in your thoughts on the potential funding models:**
>
> **- To what extent will they incentivise multi-carrier solutions?**
>
> **- To what extent will they deliver the policy intent of the National RRAMP?**
>
> **- Are there any further costs which should be eligible for funding?**
>
> **- Would a grant of 50% of eligible operational expenses for five years incentivise national MNOs to allow other national MNOs onto their infrastructure?**
>
> **- Does the market incentivise use of MNIP's infrastructure?**
>
> **? Are there any risks or potential unintended outcomes associated with the proposed grant funding structures?**

Operating Requirements

Funded solutions are expected to operate for a 10-year period after works are complete. All MNOs party to the application will be required by the grant agreement to provide mobile coverage services for this operating period.

Infrastructure owners are expected to bear the costs of the ongoing operation for this period (subject to any grant to support operating costs).

Funded solutions that are macro cell base stations are expected to meet minimum resilience requirements, such as at least 12 hours of back-up power supply. Solutions that are not macro cell base stations (e.g. small cells and upgrades) should incorporate back-up power, if feasible.

> **? What should the minimum resilience requirements be for mobile infrastructure under the RRAMP?**
>
> **? Are there additional operating requirements that should be considered?**