



**SUBMISSION TO THE REGIONAL CONNECTIVITY  
PROGRAM: DRAFT GRANT OPPORTUNITY  
GUIDELINES ROUND 3**

**BETTER INTERNET FOR RURAL REGIONAL AND REMOTE AUSTRALIA**

**Due:** 14th February 2023 (with extension from Dept.)

**Prepared by:** Kristy Sparrow

Contributions from: Rachel Hay, John Kitchener, Julie Stott, Adam Broadbent & Sharon Single

\* This submission was prepared in good faith by a voluntary team. Please address any queries to [birraus@gmail.com](mailto:birraus@gmail.com)

## Table Of Contents

<b>Introduction</b>	<b>2</b>
<b>Better Internet for Rural Regional and Remote Australia Volunteer Group</b>	<b>2</b>
<b>RCP Round Three Objectives</b>	<b>3</b>
<b>Submission</b>	<b>4</b>
Connectivity Literacy	4
Image 1: BIRRR: Regional Internet Technology Types	5
Recommendations	6
Recommendation 1: Improve Independent Advice and Connectivity Literacy Education	6
Image 2: Technology solutions summary BIRRR Website: <a href="https://birrraus.com/regional-connectivity-program/">https://birrraus.com/regional-connectivity-program/</a>	6
Recommendation 2: Develop a strategic framework and plan, map existing infrastructure and connectivity options	8
Image 3: BIRRR Map of RCP Projects, TIEP Projects, PUMP projects & NBN & Victorian Gov announcements Live Map available here : <a href="https://www.zeemaps.com/map?group=4401811">https://www.zeemaps.com/map?group=4401811</a>	8
Recommendation 3: Improve Awareness of the Grant Program	10
Recommendation 4: Improve Community consultation and education	10
Image 4: Example of misinformation on website of RCP Round 1 Applicant - Pegasus Internet (Application by QCN Fibre through Channel Wireless)	11
Recommendation 5: Shorten timeframes for project delivery	11
Recommendation 6: RCP Place Based Solutions should prioritise fixed broadband connectivity and underserved communities outside the nbn fixed line footprint.	12
Recommendation 7: Encourage neutral host and active network sharing of mobile network funded projects	13
Recommendation 8: Incentives for hard to reach & difficult to install locations	14
Recommendation 9: Governance of Wireless Internet Service Provider's (WISPs)	14
Image 5: BIRRR Wisp Map. A live version of the WISP map can be viewed here: <a href="http://www.zeemaps.com/pub?group=2307253">http://www.zeemaps.com/pub?group=2307253</a>	15
Recommendation 10: Encourage power resiliency	15
Recommendation 11: Introduce policies to prevent overbuilding of telecommunications networks	16
Recommendation 12: Mobile Blackspot Solutions	16
Recommendation 13: Grant applicant requirements	17
Recommendation 14: First Nations Upgrades	17
Conclusion:	17
<b>References:</b>	<b>18</b>

## **Introduction**

Better Internet for Regional, Rural and Remote Australia (BIRRR) welcomes the opportunity to provide comments on the draft grant opportunity guidelines for Round 3 of the Regional Connectivity Program (RCP). BIRRR understands the aim of the RCP is to use a place-based approach to target telecommunications infrastructure investment that will respond to local priorities, maximise economic opportunities and social benefits and to improve mobile coverage in underserved regions.

BIRRR has advocated strongly for the expansion of mobile coverage, long-term public funding and for new infrastructure projects to be partnered with telecommunication infrastructure providers to both share infrastructure and improve broadband technologies for communities. We also advocated strongly for the need for a place-based approach to improving telecommunications infrastructure in the regions during the 2021 Regional Telecommunications Independent Review Committee (RTIRC) consultation.

We would like to take this opportunity to thank the Federal government and the department for their work in this space and for the development of a program that offers bespoke solutions to regional areas needing improved telecommunications. It is essential that programs such as this are continually funded and implemented, to ensure regional Australians can access communication services that meet their needs, are affordable and are equitable to services provided in metro areas.

## **Better Internet for Rural Regional and Remote Australia Volunteer Group**

The Better Internet for Rural, Regional & Remote Australia (BIRRR) group was founded in 2014 due to a lack of information, advocacy, and support for bush broadband consumers. There are now almost 15,000 active and engaged BIRRR members from every state and territory of Australia. In particular, the BIRRR group includes those that are requiring equitable telecommunications for their regional businesses, telehealth and the education of their children.

BIRRR is a technology agnostic, apolitical and independent volunteer support, advisory, information and advocacy group. Our admin all live in regional areas, are using a variety of connections and have extensive grassroots experience in regional connectivity, none of our admin profit in any way from the telecommunications industry and BIRRR is entirely based on a volunteer model.

Rural, Regional & Remote (RRR) consumers are extremely reliant on effective telecommunications, due to the nature of their geography and vulnerability, and this also heightens the need for effective representation. In an industry that lacks independent advice, advocacy and assistance, BIRRR

combines lived experience, regional and industry knowledge to address the barriers to regional Australians in getting connected and staying connected.

BIRRR believes that *“Every Australian, irrespective of where they live or work, should be confident they have the skills, knowledge and infrastructure to access quality, reliable, affordable and equitable voice, and broadband services with consumer support guarantees”*.

## RCP Round Three Objectives

The objectives of Round 3 of the Program are to:

- use a place-based approach to target telecommunications infrastructure investment that will respond to local priorities and maximise economic opportunities and social benefits for regional, rural and First Nations communities; and
- expand mobile coverage in regional, rural, and First Nations communities.

The intended outcomes of Round 3 of the Program are to:

- Provide **place-based solutions** to regional digital connectivity issues through a range of new or improved broadband services and/or improved mobile services;
- Provide **Mobile Black Spot Solutions** to expand mobile coverage and competition across regional and rural Australia; and
- Complement the National Broadband Network, including the NBN fixed wireless upgrade, and the telecommunications industry’s commercial investment plans.

The Program’s Round 3 Grant Opportunity will support projects that deliver new telecommunications infrastructure or the upgrade of existing telecommunications infrastructure to provide:

- economic and social benefits in regional, rural and First Nations areas; and / or
- **New Handheld Coverage** to regional, rural and First Nations areas.

For Regional Connectivity Solutions, the Round 3 Grant Opportunity will focus on areas:

- of high economic and/or social value
- outside the NBN fixed-line footprint; and
- where better connectivity and increased data have a clear benefit to a local region.

## Submission

### Connectivity Literacy

While connectivity literacy is not addressed in the RCP Round 3, it is important to understand that connectivity literacy skills are required to assist consumers and regional stakeholders to clearly understand how the Better Connectivity Plan for Regional and Rural Australia will assist with consumer needs and place based solutions.

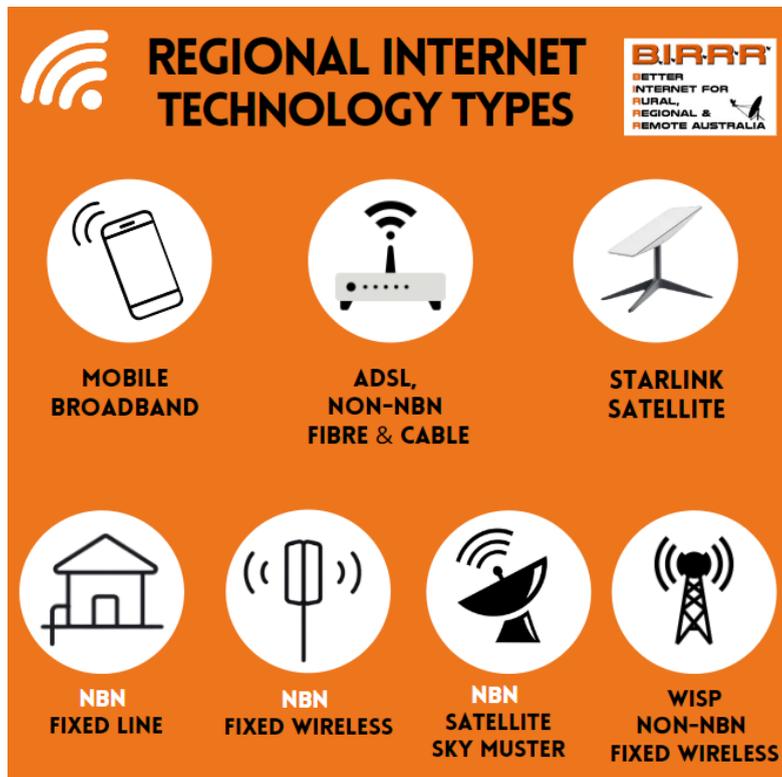
Connectivity literacy was first termed by BIRRR Admin, Kristy Sparrow, who has extensive grassroots experience and knowledge in regional telecommunications. *“Connectivity literacy is all of the skills and knowledge needed by a consumer to get connected and stay connected to equitable, affordable and reliable voice and broadband services that meet their needs and budgets”.*

It is separate from digital literacy as the skills required to navigate through a choice of providers and technologies, understand terminologies, plans and equipment are different skills than what are needed to physically use a broadband service. BIRRR research demonstrates that connectivity literacy does not have any demographic barriers such as age, gender, location, or education level.

Connectivity illiteracy exists not only at a consumer level but also within local government, industry, state government and other regional stakeholder groups. Connectivity illiteracy issues have developed in RRR areas due to misinformation/ disinformation, a lack of support and education, procurement processes and poor consumer guarantees as regional Australia has moved from limited providers with a limited choice of technologies and plans, to a patchwork quilt of connectivity, plans, speeds, providers, and technologies. Regional connectivity illiteracy is generated by the vast differences between urban and regional connectivity solutions and exacerbated by vendor driven, rather than place-based connectivity advice and solutions.

Urban customers enjoy secure high-speed mobile connectivity (multiple providers) and connections to secure unlimited plans. A secure landline service is available via nbn fixed line services. Nbn fixed line internet is uncontended, well supported and largely trouble free. *By contrast regional customers use an entirely different connectivity sub-set. They may or may not have mobile connectivity. Mobile connectivity is more often available from only one provider that may only support voice and very limited internet.* Broadband is provided by ADSL, nbn Fixed Wireless, nbn Sky Muster, Mobile

Network(s), Starlink and for some select areas a Wireless Internet Service Provider (WISP). By any measure these very different and highly contended technologies are no match for a fixed line connection and regional consumers must navigate a complicated maze in order to get and stay connected.



*Image 1: BIRRR: Regional Internet Technology Types*

The government must consider ensuring each government grant program has a quarantined small component of funding for connectivity literacy support. With new technologies being rolled out in regional areas, getting connected and staying connected at a reasonable cost for the service requirement, will become more complex.

The digital divide will grow wider without targeted solutions to address the regional connectivity illiteracy problem.

## Recommendations

Existing Government programs have made a significant positive impact on the improvement of telecommunications infrastructure in regional areas. BIRRR thanks the Department for the opportunity to consult and provides the following recommendations for the **Regional Connectivity Program (RCP) Round 3 Grant Opportunity Draft Guidelines**.

### **Recommendation 1: Improve Independent Advice and Connectivity Literacy Education**

BIRRR has identified a lack of independent advice and support available to communities and Local Governments (LGA’s) as a major barrier in being able to fully utilise and participate in programs such as the RCP. Telcos are commercially driven and communities and local Governments often struggle to understand or find the knowledge needed to plan and roll out telecommunication solutions and choose the best solution for their specific community.

Technology Summary	Mobile Broadband	nbn Fixed Wireless	nbn Fixed Line	Alternative Wireless Internet Service Provider (WISP)
<b>Choice of Provider</b>	<ul style="list-style-type: none"> <li>Limited to three main carriers + re-sellers (generally resellers don't have access to full wholesale networks)</li> </ul>	<ul style="list-style-type: none"> <li>Large range of providers offer plans on the network</li> </ul>	<ul style="list-style-type: none"> <li>Large range of providers offer plans on the network</li> </ul>	<ul style="list-style-type: none"> <li>Usually only one provider</li> </ul>
<b>Affordability</b>	<ul style="list-style-type: none"> <li>Limited in data, higher data amounts can be limited to certain areas (Optus)</li> <li>Plan costs similar to nbn fixed wireless/fibre.</li> <li>Often have lock in contracts for plans.</li> <li>Equipment costs vary.</li> </ul>	<ul style="list-style-type: none"> <li>Most providers offer unlimited data plans for metro comparable prices.</li> <li>Free install and good providers offer no lock in contract.</li> </ul>	<ul style="list-style-type: none"> <li>Most providers offer unlimited data plans for metro comparable prices.</li> <li>Free install (except for new developments) and good providers offer no lock in contracts.</li> </ul>	<ul style="list-style-type: none"> <li>Dependant on each specific company, for higher speeds and data plan costs can be in excess of \$200/month.</li> <li>Most are contract based plans, which are often long, with varying equipment charges.</li> </ul>
<b>Can meet future growth / demand</b>	<ul style="list-style-type: none"> <li>Can suffer from congestion, especially if high tourist area or transient population (e.g backpackers).</li> <li>Can cover a wider area/more residences.</li> </ul>	<ul style="list-style-type: none"> <li>Can suffer from RSP congestion.</li> <li>May not cope with future growth e.g. large business, mining, town growth.</li> <li>Can cover a wider area/more residences.</li> </ul>	<ul style="list-style-type: none"> <li>Future-proof connectivity for the township.</li> <li>Limited to town area (not financially viable to extend to outlying properties).</li> </ul>	<ul style="list-style-type: none"> <li>Can suffer from RSP congestion.</li> <li>May not cope with future growth e.g. large business, mining, town growth.</li> <li>Can cover a wider area/more residences.</li> <li>Locked into one provider.</li> </ul>
<b>Regional Connectivity Program</b>	<ul style="list-style-type: none"> <li>Upgrading backhaul capacity</li> <li>Coverage along major transport routes &amp; public interest premises such as schools, health centres &amp; tourism hotspots</li> <li>Indigenous communities</li> <li>Areas with high transient population or closely settled rural properties</li> </ul>	<ul style="list-style-type: none"> <li>Technology flip from nbn Satellite to nbn Fixed wireless for a township, or fringes of a fibre based town or between towns when rural properties are closely settled.</li> </ul>	<ul style="list-style-type: none"> <li>Technology flip from nbn Satellite or nbn Fixed Wireless - to nbn FTTP for a township</li> </ul>	<ul style="list-style-type: none"> <li>For smaller towns mapped for nbn Satellite or fringes of a fibre based town or between towns when rural properties are closely settled.</li> </ul> 

Image 2: Technology solutions summary BIRRR Website:

<https://birrraus.com/regional-connectivity-program/>

The Department should provide assistance to LGA's and other potential stakeholder groups who may not have the connectivity literacy skills required to analyse different technology upgrade options for their communities / businesses. The development of a handbook on the technologies used in regional areas and the benefits and downfalls of each technology would be beneficial to assist regional communities to be informed and educated. BIRRR has previously compiled a brief summary (see Image 2) after being contacted by numerous LGA's, community groups and industry groups for assistance in understanding how to match technology solutions to needs, budgets and available backhaul and resources. However, BIRRR is a volunteer group, under-resourced and not able to provide this support on a large scale. To our knowledge the Regional Tech Hub is also not resourced or equipped to provide this support on a large scale. The handbook should include definitions on technology types as well as definitions on terminology such as backhaul, microwave links, fibre etc.

It would also be useful to detail how to conduct a connectivity audit of what is currently available in a community, as well as what the community needs are for future growth and demand of connectivity services, including economic, social and cultural factors. Regional communities need to be supported through grant applications such as RCP, however this support can not be provided by commercially driven telcos who will only recommend their product and solution, regardless if this is in the best interest of the community and their needs.

**Recommendation 2: Develop a strategic framework and plan, map existing infrastructure and connectivity options**

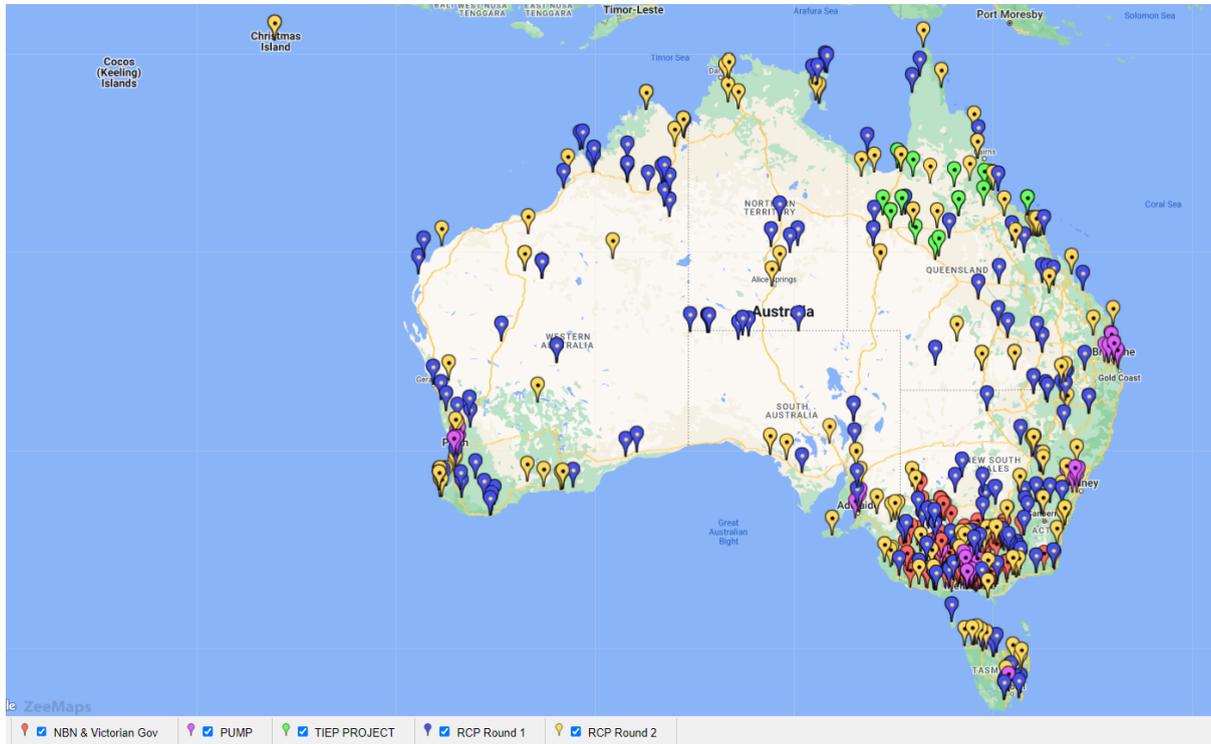


Image 3: BIRRR Map of RCP Projects, TIEP Projects, PUMP projects & NBN & Victorian Gov announcements **Live Map** available here : <https://www.zeemaps.com/map?group=4401811>

NB: Map needs to be updated with recent announcements

Existing regional connectivity upgrade programs are very ‘siloe’d’ and there is little collaborative work being done to plan for the future, solve existing problems and capacity issues and maximise regional telecommunications investment. This has resulted in a ‘patchwork quilt’ of connectivity options with no map or tool that outlines what is available or where the gaps are. If a regional consumer is looking for a telecommunications connection they currently need to navigate through complex websites to find what is available or lodge a connectivity report request with the Regional Tech Hub (RTH). Whilst the connectivity reports are a fabulous resource, these are labour intensive and can take up to 4 weeks to produce. New projects funded by RCP, WISP’s and newer technologies are often difficult to find and have low consumer awareness.

There is a need for the different levels of government (Federal, state, local) to work together with the telecommunications industry and other regional telecommunications stakeholders to develop a regional connectivity plan or roadmap that is forward-thinking and encompasses future needs and

growth of regional communities. Working together collaboratively could deliver improved capacity, redundancy, adequacy and reliability of regional communications using strategies such as:

- Developing a framework for funding programs that has a set of key criteria that prioritises funding, although this was covered in some aspects of earlier rounds of the RCP, it needs to be more widely applied across all telecommunications project funding and factor in things such as remoteness, population, social and economic benefit, risk of natural disasters, redundancy already available, health, education, tourism and business benefits.
- Establishing a map of regional backhaul availability Australia wide. This would greatly assist infrastructure providers, enabling them to easily access available backhaul and thus determine if improved communications infrastructure can be provided to regional communities within budget constraints. We understand the security risks involved, however if this project was completed at a Department level and not made public, it would allow for a more thorough plan to solve existing backhaul and capacity gaps.
- Future planning or technology roll out in regional communities must support the growing need for faster speeds and symmetrical services (both upload and download speeds), with unlimited data and low latency for all rural, regional and remote residences and businesses. Long term planning should consider future proofing connectivity so that future growth in connectivity capacity is factored in.
- It is essential that any decisions on future roll outs of technologies are backed by appropriate and adequate research into the needs, wants and budgets of regional users and come with appropriate consumer protection when faults and issues arise. For example, if rain fade (BIRRR RTIRC Submission 2021 Page 61) is identified as an issue that affects satellite reliability in the tropics, then other technologies need to be investigated that could overcome this issue. If latency affects the use of certain platforms that are essential for education, working from home and business use, then lower latency technologies should be investigated and trialed.
- All funded projects and existing technologies should be combined into an easy to use app or website, so consumers are able to access the connectivity options available to them in one central location.

The Department may be able to find instances where plans and maps have already been utilised and developed, for example the WA Digital Infrastructure Atlas, see <https://www.agric.wa.gov.au/digitalinfrastructureatlas> The Atlas illustrates all key telecommunications infrastructure such as the telephone exchanges, dark fibres and

radio-communication sites around Western Australia. Some regional councils have also undertaken digital and communication audits which could be used as a starting point for communities and understanding their needs and current limitations. As an example, the Central Highlands Regional Council Queensland Digital and Communication Audit (Queensland) and the Gippsland Regional Digital Plan (Victoria). However, as the majority of audits are undertaken by business consultants rather than regional connectivity experts, very few of these understand or address the role connectivity literacy plays in helping communities find and roll out a solution, or get their businesses and residences connected.

There is an urgent need for an Australia wide connectivity roadmap and framework that not only addresses the connectivity gaps but also highlights existing fibre routes and backhaul and plans for future demand, with connectivity literacy support for consumers. The development of a framework and map of available connectivity would greatly assist grant applicants in identifying where the connectivity gaps are and which areas need investment and help ensure solutions are funded that will meet the needs of the communities into the future.

### ***Recommendation 3: Improve Awareness of the Grant Program***

RCP should be more widely advertised in regional communities through stakeholders such as the Chamber of Commerce, Local Government (LGA's) and industry groups . During RTIRC consultations many LGA's and industry groups were unaware of RCP funding, who to contact to start an application and how to apply for the grant. The program could be advertised by MP's, on social media, through regional stakeholder newsletters and social media (such as BIRRR, ICPA, AgForce and CWA) and in LGA correspondence.

### ***Recommendation 4: Improve Community consultation and education***

Despite previous rounds of RCP stating community consultation was a key component of the grant process, BIRRR is aware of several RCP 1 projects that have been rolled out and are now active that have not been advertised in the community, resulting in low take up and a lack of awareness of these connectivity builds. Community engagement needs to occur prior to the grant application, during discussions on place based solutions, at build stage and at ready to connect stage. It is not enough to only engage the community prior to the grant application. Communities should be kept informed throughout the whole grant and build process.

- Connection and plan information and costs should be made easily accessible and readily available for consumers for all RCP grant applicants.
- Applicants should be able to demonstrate engagement with LGA's and be able to show community education and liaison has occurred.
- Applicants should ensure that their websites and marketing material do not add to the misinformation and disinformation (see Image 4) that is currently prominent in the regional telecommunications industry, as it creates barriers to consumers in these areas getting and staying connected (see BIRRR RTIRC Submission, 2021)
- Applicants should ensure connectivity builds include budgeting for consumer awareness, marketing and connectivity literacy education. For example, communication for RCP 1 nbn tech flips from satellite to FTTP was lacking, particularly on the process of how to get connected. Businesses and residents were (still are) confused about how to get connected to the projects and terminology used was complex, with several projects using contractors (Ventia for nbn projects, Channel Wireless / Pegasus for QCN projects) which further complicated community engagement. This has resulted in low take up in these communities, in some cases less than 40% of the community receiving equipment and getting connected.

**HOW DOES PEGASUS  
INTERNET DIFFER TO NBN IN  
OUR AREA?**

NBN currently offer satellite services in our area which are very slow, have limited downloads and are expensive. Like Pegasus Internet, Fixed Wireless technology is also used by the NBN, they just never made it to Dingo, Bluff and Duaringa. Luckily we now have a Fixed Wireless solution that is faster than NBN and less expensive.

*Image 4: Example of misinformation on website of RCP Round 1 Applicant - Pegasus Internet (Application by QCN Fibre through Channel Wireless)*

### **Recommendation 5: Shorten timeframes for project delivery**

The length of time from grant application to connectivity projects being delivered is too long. For example, many of the projects from Round 1 RCP are still yet to be delivered with predictions of end of 2023 delivery for several nbn satellite to FTTP flip projects. In many instances the LGA and nbn staff who were working on these projects are no longer employed, which has led to a lack of

communication and information being distributed to the communities. RCP grants should be able to be delivered within 12 months - 2 years of the grant recipients being notified of their success.

Future planning for new technology rollouts and funded programs need to be much further ahead than 3 years, with the ability to ensure network capacity into the future via a framework that can prioritise investment and a quantum of funds that relates to the need for regional telecommunications to be resilient, adequate, reliable and offer redundancy and affordability. Currently projects are being delivered up to 3 - 4 years AFTER the community needs have been mapped, often these needs have changed and the solution that is rolled out is already outdated and lacking capacity.

***Recommendation 6: RCP Place Based Solutions should prioritise fixed broadband connectivity and underserved communities outside the nbn fixed line footprint.***

BIRRR cautions using RCP grant funding to invest too heavily in mobile infrastructure when carriers struggle to keep up with and plan for future demand. Current policy and investment does not prioritise network sharing and handset to satellite coverage is imminent.

There is already significant MBSP funding that can be used to extend mobile coverage. With the exception of first nations communities, who have cultural and social needs for mobile broadband solutions, RCP grants should be awarded to applicants who can provide fixed home connections. Educating consumers of the benefits of fixed connections versus mobile connections is also key. Mobile broadband in many regional communities is often congested and exacerbated by tourists and itinerant workers, creating a poor experience for consumers who choose only to be connected via mobile technology.

As the emphasis of RCP is areas outside the nbn fixed line footprint, there should be priority for those towns and communities that have been 'underserved' by nbn, in particular ADSL towns mapped for nbn satellite (Sky Muster). Across Australia there are a significant number of regional towns that are mapped for nbn Sky Muster that are currently utilising legacy ADSL technology. Many of these consumers are unclear as to the future of these services, with no planned technology upgrade that would ensure comparable or enhanced communication services. nbn has underserved these communities, as nbn Sky Muster delivers less data at increased prices and a much higher latency when compared to legacy ADSL services. New alternative technologies are not as affordable

nor offer the same Australian based support and warranty as existing ADSL services, thus these communities must be prioritized for RCP funding. Additionally, voice services on nbn Sky Muster are only available via VOiP or Vo-WiFi, which can be unreliable and prone to issues. See BIRRR 2017 Submission to the Productivity Commission for issues with VOiP over nbn Sky Muster (BIRRR, 2017).

### ***Recommendation 7: Encourage neutral host and active network sharing of mobile network funded projects***

BIRRR acknowledges the current ACCC Regional Mobile Infrastructure Inquiry (Consultation Paper 1 July 2022) and will participate as required to ensure a productive outcome for Regional Australia.

The expansion of adequate and competitive connectivity in regional and remote areas is constrained by distance and cost. At cursory analysis, enabling mobile roaming on existing assets might appear politically attractive. However, BIRRR believes that this will not lead to increased mobile service coverage, bandwidth (speed) or quality. During a local emergency, the early activation of mobile roaming on existing working assets should be investigated. Emergency Roaming may help, or it may simply overload the tenuous communication links still available. The rapid provision of emergency connectivity (beyond mobile services) for impacted citizens should be the highest priority.

Solutions include Neutral Host whereby a non MNO wholesales mobiles services to the MNOs, or Active Network Sharing, which involves the sharing of equipment on towers, transmission and spectrum by carriers. The New Zealand Rural Connectivity Group (RCG) is an example of Active Network Sharing.

A Regional policy of Network Sharing would create an environment where co-investing and sharing of network infrastructure would enable multiple operators to provide services from the same towers, backhaul and infrastructure; resulting in network growth and greater competition and choice for customers. Network sharing would also encourage unused regional spectrum to be utilised and the 'pooling' of spectrum would help reduce network congestion.

Carriers can reduce roll-out and operating costs and make better use of expensive network assets while delivering huge public benefits. Put simply; the investment by each carrier 'goes further'. Future Mobile Black Spot funding should incorporate Network Sharing as its foundation.

### ***Recommendation 8: Incentives for hard to reach & difficult to install locations***

Offer incentives and grants requiring less co-contributions to providers that are willing to service 'hard to reach' and 'difficult to install' areas. Funding should not be dependent on a LGA being able to co-fund an upgrade as in many situations this will be a barrier for a large number of LGA's who do not have the funds or resources to do so. RCP funding should reward innovative thinking in solving the barriers to delivering telecommunications infrastructure to underserved areas. Ideas such as community wi-fi hotspots in first nation communities and areas with high tourist numbers, prepaid internet services for first nations communities, business hubs etc

### ***Recommendation 9: Governance of Wireless Internet Service Provider's (WISPs)***

We encourage the Department to work with established WISP's to ensure the criteria of the RCP enables them to access funding. Currently Wireless Internet Service Providers (WISP's) are solving connectivity problems in many regional areas, however with this competition there also comes confusion for consumers. Confusion between technologies, plans, terminology and how to get and stay connected with smaller and not well known providers.

WISPs remain relatively unregulated and although they are meeting a need as last mile providers in regional areas, consumers have little protection. Currently there is little regulation around who becomes a WISP. This allows rogue WISPs to randomly enter and exit the market often leaving behind consumers with an internet connection that does not work accompanied by the expense of setting it up and the cost of installing a new technology or moving to a new provider. Often those who are genuine and have good business models are overwhelmed by their industry and not responsive to consumer calls for technical assistance, negatively affecting the experience of consumers and the reputation of other WISPs. Some form of governance or regulation is required to ensure that WISPs entering the market meet a select criteria that provides a surety to consumers, other WISP providers (whose reputations are damaged by short term suppliers) and funding providers, that they will both exist in the long run and provide a reasonable consumer service. BIRRR understands that WISP's need a carrier license to operate or operate under a carrier declaration, however for a consumer to access this information it is quite complex.

There is a need for a government map of independent WISP's for regional areas, to highlight areas already served. BIRRR has a WISP provider map, however this is not comprehensive and relies on the

WISP's to keep their services updated with BIRRR, additionally not all WISP's are aware of BIRRR. Recent changes to the way BIRRR has handled this data have included ensuring all WISP's that are featured on the map have a carrier license and all WISP's have been recently contacted to update their towers.

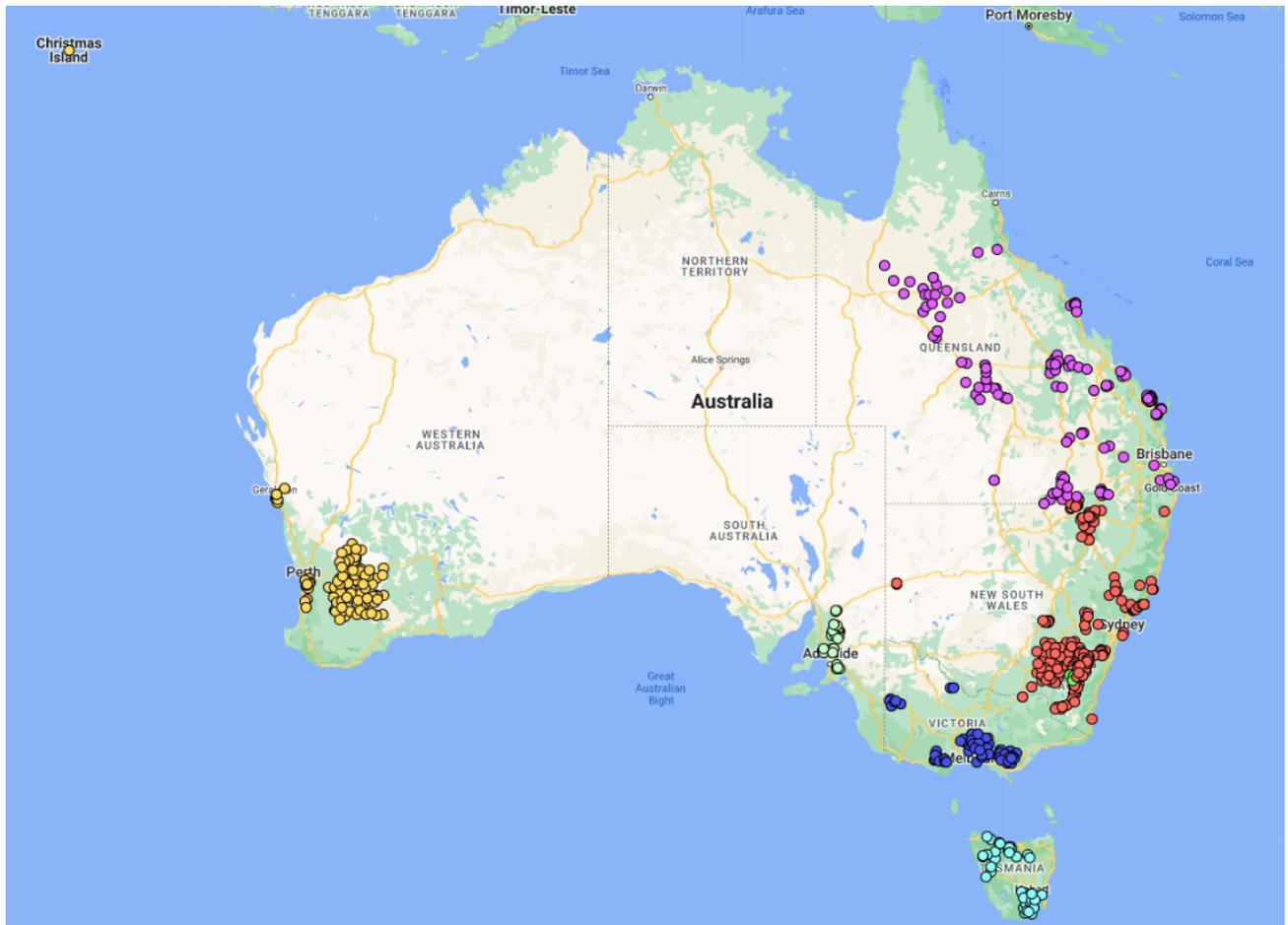


Image 5: BIRRR Wisp Map. A live version of the WISP map can be viewed here:

<http://www.zeemaps.com/pub?group=2307253>

### **Recommendation 10: Encourage power resiliency**

Battery backup at each individual premises should be installed in all nbn tech flip projects. In the majority of cases these projects are replacing ADSL connections where voice lines work during power outages. Regional power is much less reliable than metropolitan power, thus any fixed line connection that replaces ADSL should have built in power redundancy. Although this was discussed during the grant application of several nbn RCP 1 projects, there has been no guarantee back up power will be available to order once the project is built. This will leave residents vulnerable in a

power outage and often without communication. For example during June - December 2021 the township of Alpha, in QLD had 36 separate power failure events, often for periods of more than 4 hours. Power resiliency at premises should be an integral component of all RCP projects.

Network power resiliency should also be included as essential for all grant recipients. We understand that power redundancy adds to the cost of building networks, however regional power supply is far less reliable and causes significant issues to telecommunications networks during loss of supply. At a minimum 12 hours backup supply should be mandated.

### ***Recommendation 11: Introduce policies to prevent overbuilding of telecommunications networks***

Review previous RCP applications to ensure that projects of providers who applied in earlier rounds are not jeopardized by larger companies who have accessed funding in later rounds to service the same community. In particular with numerous state and industry grants for place based connectivity solutions it is imperative that a map is created to ensure overbuild does not occur in some communities whilst others are left behind.

### ***Recommendation 12: Mobile Blackspot Solutions***

BIRRR agrees that any MBSP funding should deliver new coverage. We are of the opinion that MBSP funding should **NOT** be used for repeaters and boosters. Often mobile repeaters are sold to consumers to improve coverage, when the issue is congestion on the mobile network. A booster will not solve a congestion problem and thus the consumer is left confused and frustrated. As stated in the 2021 RTIRC report:

*“...given the current limitations of mobile coverage tools, we are concerned that we would be encouraging the purchase of equipment in areas where it would not work. Submissions indicate a number of examples of this occurring. In addition, we would be concerned about a subsidy pushing traffic onto networks that are already congested. The issue could be re-examined in the future if both these issues are resolved.”* (RTIRC, 2021, p.75)

BIRRR agrees that any MBSP solution should deliver at least 4G, with carriers responsible for ensuring that towers have adequate capacity to meet future demands over the long-term. This could be achieved by ensuring carriers provide metrics on anticipated current and future performance (speed, availability e.t.c.). MBSP solutions should include power redundancy of a minimum of 12

hours in the event of power failure at the MBSP site. Grant programs should encourage the extension of power resiliency beyond 12 hours through innovative power solutions.

### ***Recommendation 13: Grant applicant requirements***

Telecommunications providers in regional Australia are commercially driven, they do not offer independent advice on connectivity to individuals, businesses or at a community level. Often services are misrepresented (see examples in BIRRR, RTIRC Submission, 2021) and with the larger choice of products consumers are easily confused. Therefore, new providers who are not well-known brands in the telecommunications industry are viewed as not being 'trusted providers' creating barriers for consumers. Providing the director ID of the retail service provider reduces entry to entities that have participated in illegal phoenix activities, creating trust within the program.

Funded solutions should be able to clearly demonstrate they have the financial means and management skills to install and provide services for a minimum of 7 years after the asset has become operational.

### ***Recommendation 14: First Nations Upgrades***

BIRRR encourages extensive consultation with First Nations communities and regional connectivity advocates and working groups, ensuring that these communities can access independent technical advice on the solutions presented to them by the telecommunications industry. It is integral that grant applications for First Nations communities understand the cultural, emotional and social needs of these communities to deliver projects that provide connectivity options that are affordable and fit for purpose.

## **Conclusion:**

BIRRR appreciates the opportunity to respond to the Regional Connectivity Program Guidelines, we are available for further discussion on the recommendations made in this submission.

## References:

- BIRRR. (2023) BIRRR WISP Map WISP map retrieved February 13, 2023 from <https://www.zeemaps.com/map?group=2307253>
- BIRRR. (2023b) Rural, Regional and Remote Connectivity Upgrades Map retrieved February 13, 2023 from <https://www.zeemaps.com/map?group=4401811>
- BIRRR. (2017, February). USO Submission. Retrieved September 8, 2019 from Better Internet for Rural Regional & Remote Australia <https://birrraus.files.wordpress.com/2017/02/birrr-draft-usosubmission-publicsm1.pdf>
- BIRRR (2021) RTIRC Submission. Retrieved February 1, 2023 from <https://birrraus.files.wordpress.com/2021/10/birrr-rtirc-submission-2021-final-app7-redacted-25.10.2021.pdf>
- BIRRR / ICPA (2019) Joint Submission to the Regional Connectivity program Design, retrieved February 2, 2023 from <https://birrraus.files.wordpress.com/2020/03/regional-connectivity-program-birrr-icpa-submission.pdf>
- Czinner, T. (2022, August 29). *Network sharing will bring choice and competition to the Bush*. Australian Financial Review. <https://www.afr.com/companies/telecommunications/network-sharing-will-bring-choice-and-competition-to-the-bush-20220826-p5bczl>
- Department of Primary Industries & Regional Development. (2019, June 10). Digital Infrastructure Atlas. Retrieved September 7, 2019 from Government of WA Department of Primary Industries & Regional Development: <https://www.agric.wa.gov.au/digitalinfrastructureatlas>
- Gravelroad Consulting. (2017, July). Central Highlands Digital and Communications Audit. Retrieved September 7, 2019 from Central Highlands Development Corporation: <https://chdc.com.au/miningenergy/digital-and-communications-audit>
- Regional Partnerships Gippsland (2019) Gippsland Digital Plan retrieved February 1, 2023 from [https://www.rdv.vic.gov.au/\\_data/assets/pdf\\_file/0010/1872946/Gippsland-Digital-Plan-Final-25-September-web.pdf](https://www.rdv.vic.gov.au/_data/assets/pdf_file/0010/1872946/Gippsland-Digital-Plan-Final-25-September-web.pdf)
- Regional Telecommunications Independent Review Committee (2022) *Regional Telecommunications Independent Review Committee Report - A step change in demand 2021* retrieved February 1, 2023 from



<https://www.infrastructure.gov.au/sites/default/files/documents/2021-rtirc-report-a-step-change-in-demand.pdf>