BIRRR Response to: Design of Alternative Voice Service Trials—request for comments and expressions of interest

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* This submission was prepared in good faith by a voluntary team. Please address any queries to
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Background and Overview

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. In particular, those requiring equitable telecommunications for their businesses and education of their children. There are now over 11,400 active, engaged BIRRR members from every state and territory of Australia. Rural, regional and remote (RRR) consumers are extremely reliant on effective communications, due to the nature of their geography, and this heightens the need for effective representation. The BIRRR team has undertaken extensive large-scale research on regional telecommunication needs. Previously there have been few studies and limited research into this specific consumer group. Of particular interest is the BIRRR Landline and Connectivity Survey 2018 [1].

The BIRRR Landline & Connectivity Survey [1] aimed to establish the type and state of voice communication services in RRR areas of Australia, by collecting information about user experience and technology types. The survey found that RRR people primarily use a traditional landline for their main voice communication. Furthermore, these traditional landlines are essential tools for communicating in regional areas, as almost half of the respondents have no mobile coverage inside their residence.
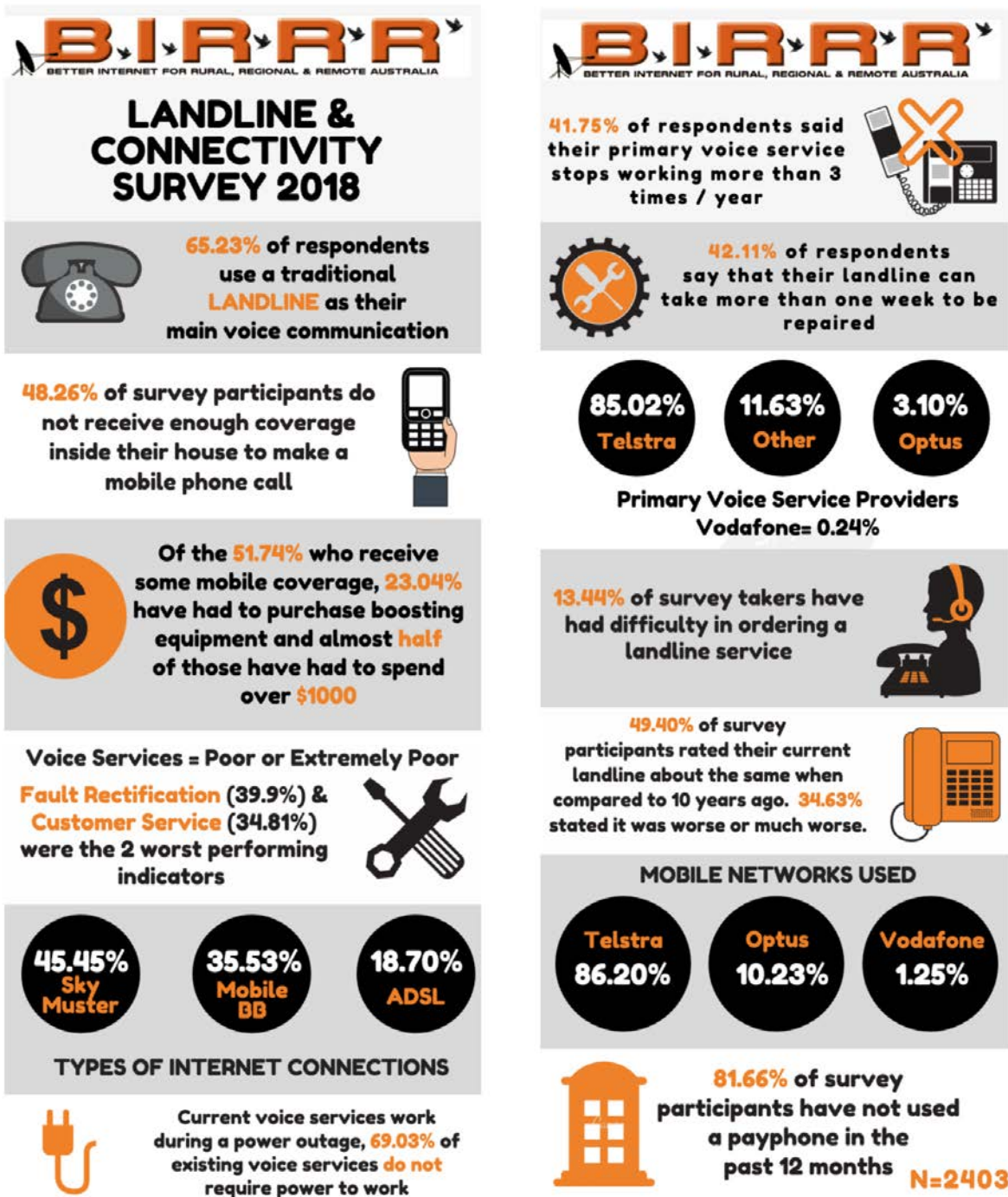
Figure 1: Infographic showing BIRRR's Landline & Connectivity Survey Results [3]

BIRRR's concerns with RRR landlines and alternate voice services was highlighted in our 2017 submission to the Productivity Commission DRAFT Telecommunications Universal Service Obligation (TUSO) Report [2].

Response to Feedback

BIRRR appreciates the opportunity to respond to the Regional Connectivity Program: Alternate Voice Design Trial. We commend the Federal Government, in particular Minister Bridget McKenzie, for recognising the need for funding to investigate alternatives to ageing landline systems in RRR areas and for her commitment to visiting RRR areas to experience firsthand the many and often complex, landline issues.

BIRRR's landline and connectivity survey mapped the respondent's main voice communication type. It highlighted the need for alternate voice services to be developed, particularly those in High Capacity Radio Concentrator (HCRC) and RRR copper landline areas.
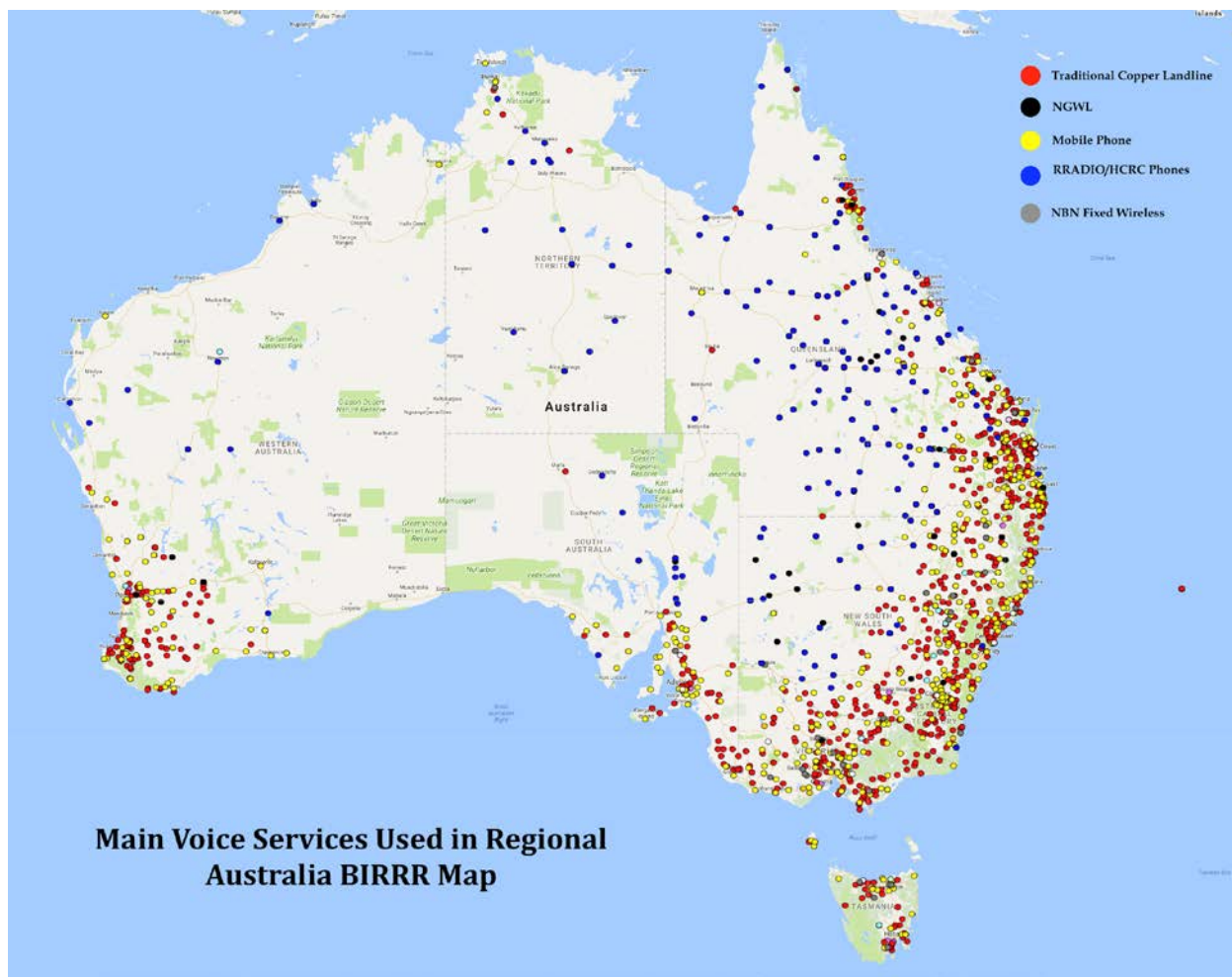
Figure 2: Map showing the survey participant's and their main form of voice communication [4]

This submission responds to the feedback questions on the proposed design for trials of alternative ways to deliver voice telephone services in RRR areas of Australia with a focus on HCRC and Copper networks.

Question 1: *Should the department be seeking to achieve other objectives through the trials? If so, how would this affect the design?*

All alternate voice trial services should consider:

- An improvement on current HCRC and degraded copper landlines, no customer should be worse off in regards to reliability, costs, service quality and service guarantees.
- The design should consider the service it will present e.g. a standard copper service interface, or something smarter? i.e. an off the shelf phone or a proprietary phone?
- The technology must provide low latency voice services If the capability exists, (something better than 20ms which is the current mobile service phone to tower delay), better than 5ms is recommended.
- Low latency data capability.

Question 2: *In terms of the deliverables for customers, do you have any concerns about the proposed design of the trials or suggestions to improve it, for example, locations for the trials, how best to recruit consumers to take part, requirements on CSPs, and service requirements?*

- **How to best recruit consumers to take part**
  - To best recruit consumers for the trial, use the Rural Regional Remote Communications Coalition (RRRCC) to advertise the trial. BIRRR recommends that end users are not subjected to cold calls.
  - Collect data on people who are interested in trialling an alternate voice service by getting them to sign up online and via a hotline number they can call in on
- **Requirements of the trial.**
  - Being able to use existing infrastructure such as HCRC towers would be a bonus for alternate voice service providers.
- **Locations of the trial.**
  - Obviously limited to the trial technologies that are proposed, however, those with no mobile coverage should form a large percentage of trial customers where possible. BIRRR cautions using mobile coverage maps as an indication of reliable mobile coverage and as such a replacement for landlines. Mobile coverage is patchy in rural and regional areas (non-existent in many remote areas) and would not meet minimum standards in regards to reliability, affordability, accessibility, quality of service (QoS) and repair times. Some rural properties may get coverage outside their homes, but without significant investment (through the purchase of boosters and antennas 48% of BIRRR Landline Survey respondents spent approx. $1000-$2000 to boost their mobile coverage) by the end user there is insufficient coverage to make or receive a call inside the house [1].
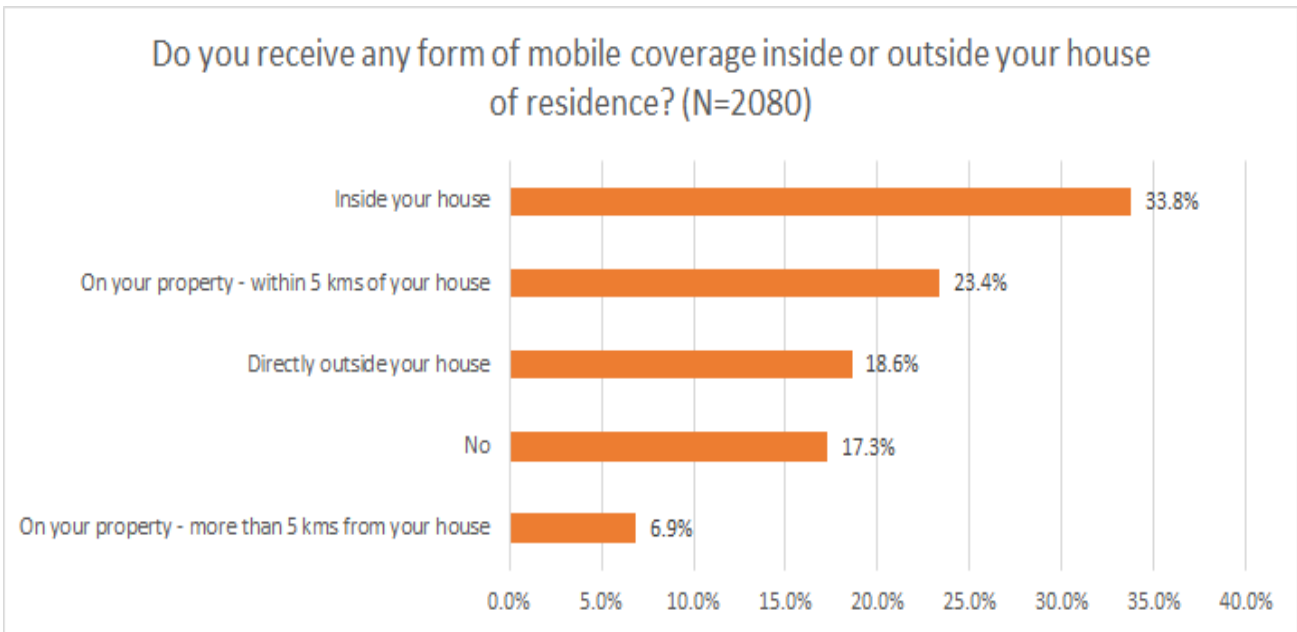
Figure 3: Mobile coverage inside and outside of respondents residence [1]
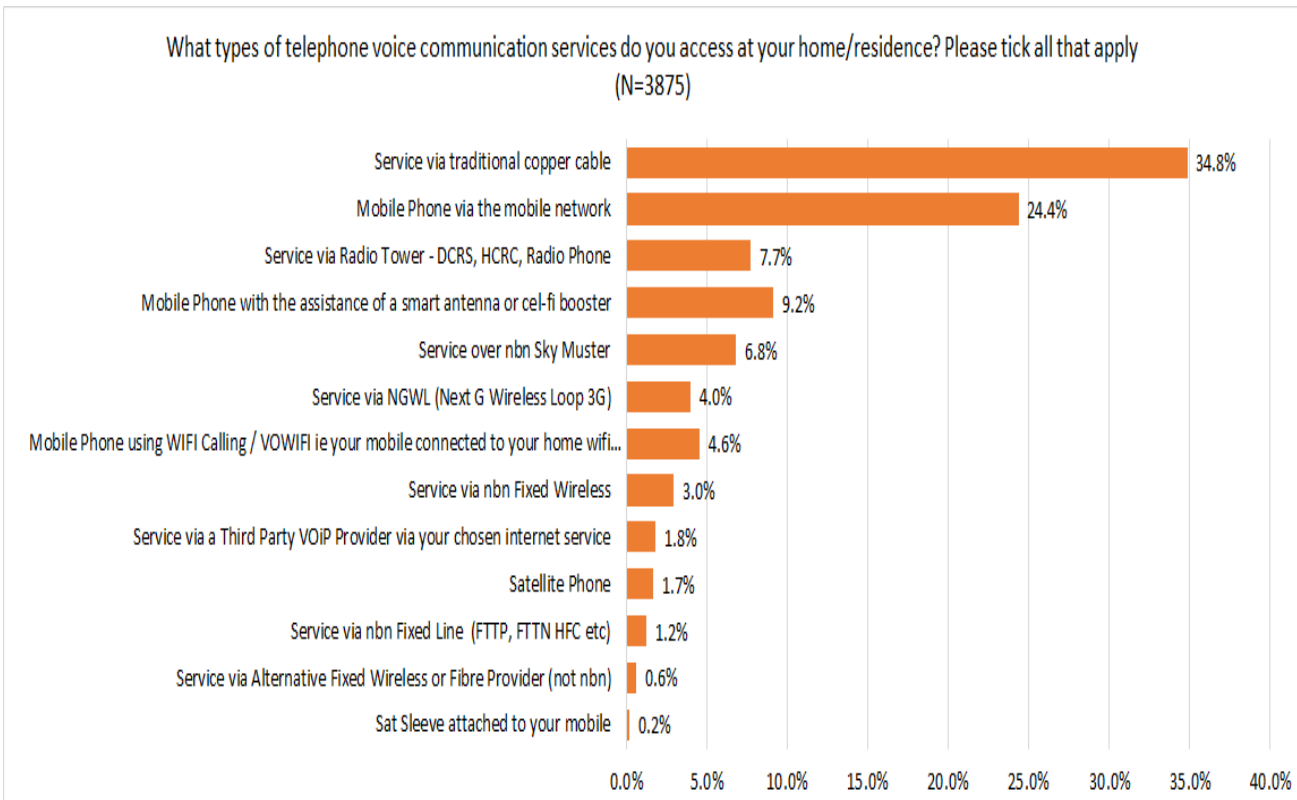
Figure 4: Types of telephone services accessed by survey respondents (multiple responses) [1]

- BIRRR recommends the Department refer to the BIRRR Landline Survey [1] for clusters of end users who have had ongoing issues with landline phones, survey data can be shared with prospective providers.

Table 1 identifies both HCRC and Copper areas that may be suitable for the trials.

| Current Type of Voice Comms	Postcode	Closest Town/Parish	BIRRR Survey Respondents (n)
Radio Tower - DCRS, HCRC, Radio Phone	0846, 0850, 0852, 0860, 0862, 0870, 0872	Adelaide River, Katherine, Burdum, Delamere, Larrimah, Stuart Plateau, Tennant Creek, Roper Gulf, Alice Springs, Hart, Lajamanu, Pamayu, Sandover, Yuendumu, NT	26
	4820	Charters Towers, QLD	18
	4816	Prairie, Torrens Creek, QLD	16
	4871	Croydon, Einasleigh,QLD	15
	4630	Rawbelle, QLD	13
	4721	Clermont, QLD	13
	4872	Greenvale, QLD	13
	4472	Blackall, Ingberry, QLD	12
	4735	Winton, QLD	12
	4455	Roma, Tingun, QLD	11
	4724	Alpha, QLD	11
	4823	Julia Creek, McKinlay Shire, Nelia, QLD	11
	4804	Collinsville, Mt Coolan, Sellheim, QLD	10
	6725	Broome, WA	10
Copper	2250	Gosford, NSW	18
	2354	Kentucky, Nowendoc, Walcha, NSW	19
	2387	Rowena, Wee Waa, NSW	10
	2400	Bullarah, Crooble, Moree, NSW	12
	2474	Kyogle, Uki, Wadeville, NSW	12
	2480	Lillian Rock, Nimbin, NSW	10
	2508	Darkes Forest, Helensburgh, NSW	15
	2580	Goulburn, Greenwich Park, Jerrong, Mummel, Taralga, Windellama, NSW	11
	2620	Carwoola, Googong, Gundaroo, Sutton, Tinderry, Urila, Wamboin, NSW	23

Current Type of Voice Comms	Postcode	Closest Town/Parish	BIRRR Survey Respondents (n)
	2621	Bungendore, Bywong NSW	12
	2622	Araluen, Back Creek, Bendoura, Braidwood, Duran Dura, Majors Creek, Mulloon, Warri, NSW	15
	2795	Bathurst, Billywillinga, Clear Creek, Duramana, Meadow Flat, Paling Yards, Sofala, Triangle Flat, NSW	12
	2840	Bourke, NSW	11
	2843	Coolah, NSW	24
	2850	Botobolar, NSW	10
	2880	Broken Hill, NSW	18
	4380	Stanthorpe, Thorndale, QLD	11
	4390	Goondiwindi, Wyaga, Yelarbon, QLD	11
	4405	Ranges Bridge, QLD	10
	4413	Chinchilla, Kragra, QLD	10
	4416	Condomine, QLD	12
	4570	Bella Creek, Cedar Pocket, Gympie, Imbil, QLD	11
	4610	Booie, Boondooma, Coolabunia, Durong, Haly Creek, Kingaroy, Wondai, QLD	10
	4660	Childers, Redridge, South Isis, QLD	15
	4671	Gin Gin, Horse Camp, Maroondan, Boolboolaman, Mount Perry, QLD	11
	4702	Anakie, Dingo, Dululu, Jambin, Ridgelands, Rubyvale, QLD	25
	4725	Barcaldine, QLD	14
	4730	Longreach, QLD	22
	4737	Koumala, Sarina, Sarina Ridge, QLD	12

Table 1: Suggested areas for the trials selected by number of survey responses from the area sorted on type of voice communication, postcode and closest town or Parish [1]

- BIRRR has also identified (through their troubleshooting data collection process) clusters of localities who have landlines in need of attention in the following areas.
    - **South Australia** - Adelaide Hills, Kangaroo Island, Mount Gambier & surrounds.
    - **Tasmania** - cluster areas to the west of Launceston and south of Hobart as identified on the BIRRR Landline Map [4]
- **Northern Territory** - HCRC scattered throughout the territory in very remote locations.
- **Western Australia** - cluster areas to the south and east of Perth as identified on the BIRRR Landline map [4]

- **Victoria, New South Wales & Queensland** - please refer to the BIRRR Landline Map [4] for large numbers of cluster areas
- BIRRR Troubleshooting Map [5] also contains data highlighting clusters of concern for RRR landlines and ADSL connections. <mark>(Please note this map contains confidential information and can not be publicly referenced)</mark>
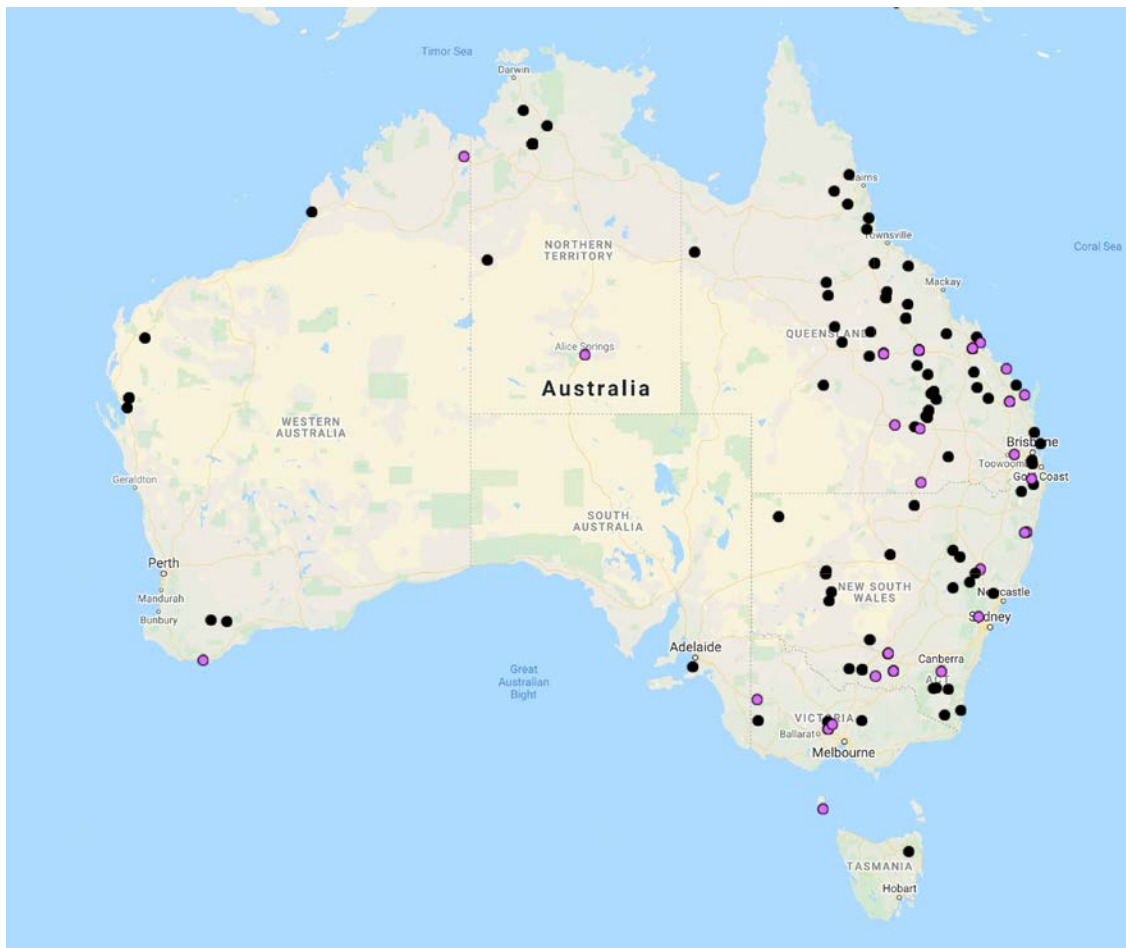

Figure 5: BIRRR Troubleshooting Map, highlighting consumers with issues with Landline (black) and ADSL (purple) connections [5]

Question 3: *In terms of the needs of CSPs, do you have any concerns about the proposed design of the trials or suggestions to improve it, for example, information required, capping of customer numbers, timeframes, level of funding available, and the approach to payment?*

- Alternate voice services that can provide add on such as caller ID, multiple handsets for a single service, more than one number at a single premise, voice mail, conference calling, call forwarding etc should be encouraged.
- Battery backup options would be advisable i.e. the service continues to function for x number of hours after a local or regional power failure.
- Having the ability to keep existing landline numbers
- Priority assistance service guarantee for those with medical needs. Considering that this is a lifeline for the vast majority of rural customers, the service guarantee should be at the highest level available.

- Prospective trial providers may be sourced from BIRRR's Alternate Fixed Wireless Provider Map [6], many of these smaller providers are already providing alternate voice services in RRR areas.
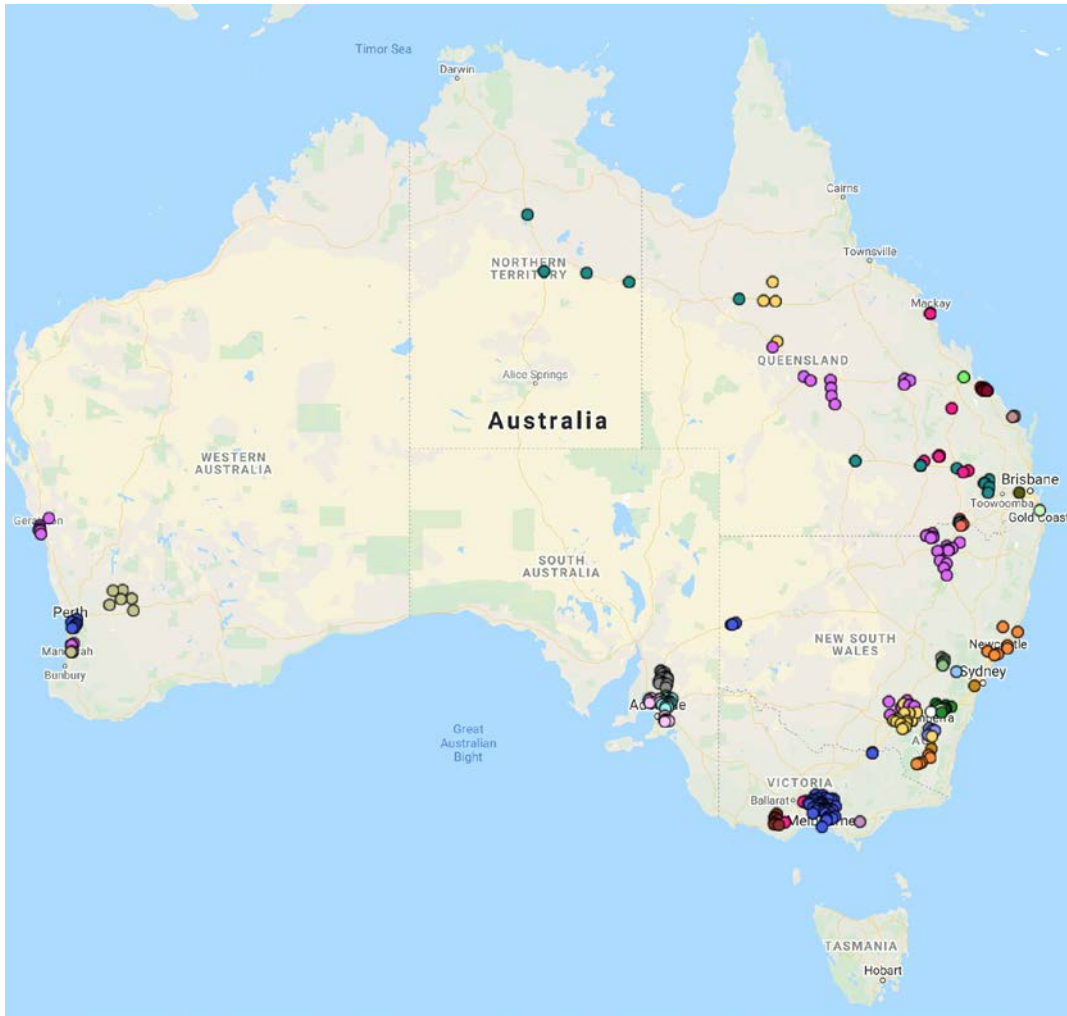
Figure 6: BIRRR Alternate Fixed Wireless Provider Map, highlighting non-nbn Fixed Wireless locations across Australia [6]

Question 4: *Do you have suggestions on what should happen at the end of the trials, noting that Government funding will cease?*

- BIRRR would like to see ongoing Government funding to providers offering tried and tested (and deemed successful) alternative voice services. The USO with Telstra is in place until 2032, however, it is our belief that alternate providers will need a financial incentive to roll out new alternate voice technologies.

Question 5: *Do you have any comments on the stakeholder reference group? What stakeholders should be represented on the groups? Would you like to nominate anyone as a possible member?*

- BIRRR would like to be involved in the stakeholder reference group and encourage the Department to ensure stakeholders with on the ground experience and understanding with RRR landlines are included in the reference group. Stakeholder groups such as Isolated Children's Parents' Association (ICPA),

BIRRR & Country Women's Association (CWA) have on the ground experience with landline issues in RRR areas.

Question 6: *Do you have any comments regarding the criteria for assessing proposals and contracting CSPs?*

- Providers must be able to support the end user with troubleshooting and any issues that may arise with their trial service.
- The alternate voice service should not cost more than a traditional landline service and should offer greater reliability and service quality than the end users current traditional landline.
- Alternate voice services should have clear customer service guarantees and offer customer support through a dedicated contact number and email.
- Voice quality, service reliability, ease of maintenance, service life time and minimal operating expenses must be amongst the highest on the assessment criteria. RRR users need something that works for the next 50 years, not the next 10.

Question 7: *Do you think regular surveys of trial customers would be useful? Do you consider there are any particular matters that should be monitored and evaluated during the trials in addition to those identified (e.g. service outages, quality issues and customer turnover)?*

- Surveys would be useful and should include provider's ability to provide specialist customer service.
- Forums, online groups, and workshops where trial users can go to discuss problems, try out suggested fixes and to follow users experience would add value to the trial.

Question 8: *How would the trials be best promoted to rural and remote customers by both the department and CSPs? How would the results of the trials be best communicated once they are complete?*

- Trials could be promoted via the RRRCC membership base, with prospective participants invited to 'sign up' online or via a dedicated hotline.
- In some instances, respondents who have identified via BIRRR's troubleshooting or survey processes, could be contacted via personal communication from BIRRR to be involved in the trial.
- ABC Radio and regional newspapers would be useful tools to highlight the trial and its aims and encourage further participation.

References

1. 2018 BIRRR Landline & Connectivity Survey (2403 respondents)
   https://birrraus.files.wordpress.com/2019/03/birrr-landline-2018-survey-results-published.pdf

2. 2017 BIRRR Submission to the Productivity Commission DRAFT Telecommunications Universal Service Obligation (TUSO) Report https://birrraus.files.wordpress.com/2017/02/birrr-draft-uso-submission-publicsm1.pdf

3. 2018 Infographic showing BIRRR's Landline & Connectivity Survey Results
   https://birrraus.com/submissionssurveys/birrr-surveys/

4. 2018 BIRRR Landline & Connectivity Survey Map http://j.mp/371ytos

5. 2020 BIRRR Troubleshooting Map - highlighting consumers with issues with Landline (black) and ADSL (purple) connections (Please note this map contains confidential information and can not be publicly referenced) http://j.mp/2vecttc

6. 2020 BIRRR Alternate Fixed Wireless Provider Map, highlighting non nbn Fixed Wireless locations across Australia http://j.mp/2SqDnG9