



Landline & Connectivity Survey 2018



The BIRRR Landline & Connectivity Survey – a tool to assist in lobbying for Better Communications for Rural, Regional, and Remote Australia

BIRRR

#datadrought #fixbushinternet www.birrraus.com www.facebook.com/groups/BIRRR/ 24 June 2018

Produced by Dr Rachel Hay for Better Internet for Rural, Regional and Remote Australia (BIRRR)



This report is published under a Creative Commons License (http://creativecommons.org/licenses/by-nc-nd/3.0/)



Publisher

James Cook University

Townsville, Australia

ISBN: 978-0-9954471-8-9



Contents

Contents	iii
Table of Tables	iv
Table of Figures	v
Executive Summary	6
About BIRRR (Better Internet for Rural Regional and Remote Australia)	7
About the Survey	8
About the sample	8
About the dataset	9
Results	10



Table of Tables

Table 1: Respondents type of telephone voice communication service accessed at their	
home/residence	12
Table 2: Type of main voice communication at participants home	14
Table 3: Anecdotal comments about options for participant's main communication tool	15
Table 4: Anecdotal comments from participants about how they would rate their primary voice	
service on themes service, mobile and Telstra	16
Table 5: Anecdotal comments from participants about how they would rate their primary voice service on themes landline, nbn™ and internet	18
Table 6: Anecdotal comments from participants about how they would rate their primary voice	
service on the theme poor	19
Table 7: Anecdotal comments from participants about how they would rate their primary voice	
service on themes time, days, fixed, months, weeks and fix	19
Table 8: Anecdotal comments from participants about how they would rate their primary voice	
service on themes house, calls and use	25
Table 9: Anecdotal comments from participants about how they would rate their primary voice	
service on themes issues, weather and use	27
Table 10: How respondents rated their current primary telephone service compared to 10 years	
	29
Table 11: Anecdotal comments from participant about the comparison of their current primary	
telephone service now compared to 10 years ago	29
Table 12: Anecdotal comments about why respondents could not connect a fixed landline service	ce.
	37
Table 13: Anecdotal comments about the choice not to maintain the fixed line service due to cos	st
	41
Table 14: Anecdotal comments about the choice not to maintain the fixed line service due to	
reliability	
Table 15: Anecdotal comments about the choice not to maintain the fixed line service due to voi	
quality	42
Table 16: Anecdotal comments about the choice not to maintain the fixed line service due to	
accessibility and misinformation	
Table 17: Anecdotal comments about the choice not to maintain the fixed line service due to fau	
not being rectified	
Table 18: Money spent by participants on boosting mobile signal	
Table 19: Anecdotal comments from participants about using pay phones	
Table 20: Anecdotal comments supporting claims about neighbours, friends and family who rely	
only on a fixed line service	. 50



Table of Figures

Figure 1: Better Internet for Rural, Regional and Remote Australia Facebook group (a),	
https://www.facebook.com/groups/BIRRR/, and BIRRR website (b), https://birrraus.com/	7
Figure 2: Percent of respondents by Australian State or Territory	11
Figure 3: Types of voice option respondent's access from their home/residence when they have	Э
more than one option	13
Figure 4: Map showing the survey participant's and their main form of voice communication	14
Figure 5: Participant rating of primary voice service	
Figure 6: Themes from participant rating their primary voice service	16
Figure 7: Does existing primary voice services require power to work?	32
Figure 8: Type of power mainly used at participants residence	
Figure 9: Do you have an alternative power source in the event of a power outage	
Figure 10: If your primary voice service has stopped working please select the reason why	
Figure 11: When your primary voice service stops working, roughly how long does it take to be	
repaired?	34
Figure 12: Who is your provider for your main voice communication: Anecdotal comments in oth	her?
	36
Figure 13: Why participant chose not to maintain their fixed line service	41
Figure 14: Do you ever receive any form of mobile coverage inside or outside your house of	
residence - even enough to receive a text message?	43
Figure 15: Do you receive reliable (enough to make and receive voice calls) mobile coverage	
inside your home without or without the assistance of mobile boosters or antennas?	44
Figure 16: I boost my mobile coverage with as selected by participants	45
Figure 17: Setting up the equipment/information to boost coverage into participant's houses	46
Figure 18: Do you receive 3G or 4G mobile coverage?	47
Figure 19: Which network does your mobile phone (that you receive some coverage with) provi	der
use?	47
Figure 20: What internet are participants using	48
Figure 21: Do participants use pay phones	48
Figure 22: Neighbours, Friend and Family who do not have internet access and only rely on the)
fixed landline for their voice service	49
Figure 23: Themes from anecdotal comments from survey participants about their primary voice	е
service	51



Executive Summary

Better Internet for Rural Regional and Remote Australians (BIRRR) began as a Facebook group (administered by volunteers) in 2014 with the aim of providing information and support for telecommunications services to people living and working in rural, remote and regional areas.

The BIRRR Landline & Connectivity Survey 2018 aimed to establish the type and state of voice communication services in rural, regional and remote areas of Australia, by collecting information about user experience and technology types.

The data will be used to work with the Government, telecommunication stakeholders and other relevant advocacy groups to improve and maintain voices services in rural, regional and remote (RRR) areas.

Due to the nature of their geography RRR consumers are extremely reliant on reliable voice communication services. This also heightens the need for Government policy such as the Universal Service Obligation to protect essential voice services. A landline voice service is imperative for safety and connectivity, especially in areas where there is no mobile coverage and unreliable broadband services.

The survey found that **rural**, **regional** and **remote 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 in their residence.

The survey results highlighted that respondents often have issues with fault rectification and getting problems resolved in regard to their voice services. Over 40% of respondents reported that their main voice service stops working more than three times per year. Highlighted in the survey are thousands of comments stating why placing all communication services in one basket such as nbnTM Sky Muster could lead to disastrous consequences for regional Australians.

The Government must not consider rural, regional and remote (RRR) mobile connectivity as a replacement for a Universal Service Obligation (USO) landline, until this connectivity at least meets the same service guarantees as existing arrangements. The new Universal Service Guarantee (USG) should continue to ensure that ALL Australian consumers and businesses have baseline voice services that are at least equivalent to the standard offered under the existing USO.

Standard telephone services must be maintained until such a time that baseline service needs are exceeded using alternate Broadband technology. All existing landline options must be covered under the USG (even those that are currently not included). There should be no degradation in the current voice service that users receive. The USO should be technology neutral and updatable to ensure ongoing needs are met. Every Australian, irrespective of where they live or work, should be confident they can access quality, reliable, accessible & affordable voice and broadband services with customer support guarantees. Serious commitment is needed to ensure that RRR areas are not disadvantaged due to their population and postcode.



About BIRRR (Better Internet for Rural Regional and Remote Australia)

BIRRR aims to provide information and support on telecommunications services to those living in rural, remote and regional areas. The BIRRR team gathers information across the often-confusing landscape of bush communications and delivers it via their website (https://birrraus.com/) and Facebook group to people in regional and remote areas of Australia.

Kylie Stretton (Charters Towers, QLD, Australia) and Kristy Sparrow (Alpha, QLD, Australia) founded BIRRR in 2014 as a response to the lack of information, advocacy and support for bush consumers, in particular those requiring equitable telecommunications for their businesses and to educate their children. As others throughout rural Australia heard about the plight of BIRRR, they joined the BIRRR group. With support and online action gathering momentum, administrators Kristen Coggan (Condamine, QLD, Australia), Amanda Salisbury (Monto, QLD, Australia) Julie Stott (O'Connell, NSW, Australia) and Claire Butler (Clare, NSW, Australia) joined Kylie and Kristy to help with demand. In 2015, the BIRRR website (https://birrraus.com/) was formed to help answer an ever-increasing range of issues and questions.

BIRRR uses data collected from their research to lobby government, relevant industry bodies and telecommunications providers to highlight downfalls in service provision. These shortfalls would have previously gone unnoticed. BIRRR's main aim is to ensure that people in RRR areas have equitable access to telecommunications.

BIRRR advocacy and lobbying achievements as at July 2018 include:

- Un-metering of education specific sites for Telstra mobile broadband distance education
- Education ports for distance education and home schoolers using nbn[™] Sky muster
- Encouraging nbn[™] to establish a contact team for RRR users and recorded voice service for Sky Muster outages
- Widespread survey of bush telecommunications
- Increased data on nbn[™] Sky Muster
- Development of an nbn[™] regional website
- Advocating for a regional call centre based in Australia with Telstra





a) b)

Figure 1: Better Internet for Rural, Regional and Remote Australia Facebook group (a), https://www.facebook.com/groups/BIRRR/, and BIRRR website (b), https://birrraus.com/



About the Survey

The survey sought to collect information about **landlines and connectivity in rural, regional, and remote Australia**. The data collected will be used to work with stakeholders to improve how they implement voice calls, landline use and connectivity. The survey consisted of 31 questions. Question 30 asked for an email address, if respondents agreed to participate further or should follow up information be required and Question 31 asked for an email address if the respondent would like to be kept up to date with the outcome of the survey. Respondents were asked to answer all of the questions about their landline use and connectivity.

About the sample

Cluster sampling (Saunders, Lewis, & Thornhill, 2009) was used to distribute the electronic survey via Survey Monkey ("Survey Monkey," 2017) to approximately 10,000 members of the Better Internet for Rural Regional and Remote Australia (BIRRR) database. BIRRR website and Facebook group members were encouraged to send the survey link to friends and family who live in rural, regional and remote areas of Australia, hence snowball sampling occurred (Saunders et al., 2009, p. 240).

To give all potential and current landline users the opportunity to respond, the survey was distributed outside of the BIRRR Membership database to members of the Isolated Children and Parents Association (ICPA) and to members of AgForce, and the Rural, regional and Remote Communications Coalition Stakeholders (RRRCC). The survey link was also promoted through Rural Media including the Queensland Country Life Newspaper, The Weekly Times Newspaper, ABC Radio as well as via social media. All technology types were covered in the survey, regardless of what the participant used as the main method of voice communication. Respondents who were both happy with their current voice communication service and unhappy with their voice service were openly encourage to participate.

Participants, who voluntarily responded to the survey, lived in QLD (37.5%), NSW (32.3%), VIC (10.0%), WA (8.3%), SA (5.6%), NT (2.5%), TAS (3.5%) and the ACT (0.3%, 7 responses) as well as from either of the Norfolk, Christmas, Lord Howe or Coco (Keeling) Islands (0.1%, 2 responses). To maximise representativeness of the survey and to confirm respondent's suitability for the study, the 2018 survey was restricted to all eligible rural, regional, and remote users of voice communication services.



About the dataset

Two thousand four hundred and three (2403) respondents started the **Landline and Connectivity Survey**, of those who started, **1920 respondents completed the survey**.

To test the validity of the data, the sample was grouped into completed surveys (N=1920) and total surveys (N=2403), where completed surveys were identified as those that had been started and finished. The two groups were analysed separately using frequency analysis, which determined little difference between the samples. Therefore, ALL survey responses (N=2403) were used to ensure that those respondents who could only partially complete a survey could still contribute to the study and that the rich, meaningful and lived qualitative experiences could be included in the analysis.

We acknowledge the potential for voluntary response bias, where there is overrepresentation of individuals that have strong opinions about landline connectivity in rural, regional and remote Australia. However, it should be noted that such bias is normatively defensive because the study has occurred within the explicitly advocacy based BIRRR group that has conducted its research without concealment or fabrication (MacCoun, 1998).



Results

The BIRRR team have undertaken extensive large-scale research on RRR telecommunication needs. The first report titled the "BIRRR Regional Access Survey" identifies internet use in RRR Australia (to read the report go to https://birrraus.com/press-releases/).

The second report, "The Sky Muster Survey 2017", reported on the current state of play for satellite internet connectivity in rural, regional and remote Australia and is available online at https://birrraus.com/press-releases/

This third report "Landline & Connectivity Survey 2018", reports on user experience, types of technology used and the state of voice communication in rural, regional and remote areas of Australia.

Prior to this research conducted by BIRRR, there has been few studies and limited research into this specific consumer group.

This analysis uses graphs, visuals and summary text to display responses from the participants. Where the question asks for more information, for example by having an "other" option or by asking for "more information via a text box", this information will be summarised and it will include anecdotal comments that support the summary findings. Spelling errors in the anecdotal comments have been edited. This is a preliminary report and further in depth analysis will occur as time permits. A complete list of unedited comments can be supplied by emailing birrraus@gmail.com



Source: BIRRR



Question one identifies which state of Australia the respondents live in. Figure 2 shows that the majority of respondents are located in Queensland (37.5%) followed by New South Wales

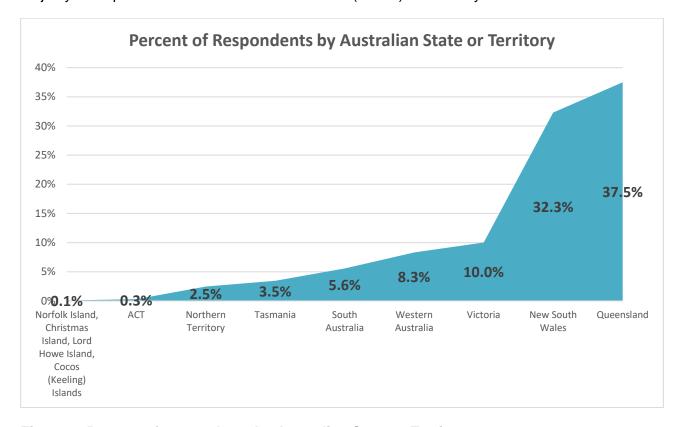


Figure 2: Percent of respondents by Australian State or Territory

Question two and three ask about the respondent's parish/locally and post code. These details are used for mapping tasks and to help identify respondents who agreed to be contacted for further assistance in **Question 30** or who wanted to be kept up to date with outcomes from this survey (**Question 31**).

Question four asks "What type of telephone voice communication service participant's access at their home/residence?" A multiple response analysis shows, nearly two thirds (63.1%) of respondents have a traditional copper cable as their main voice communication. Forty-four percent use a mobile phone via the mobile network, 16.6% use a mobile phone with the assistance of smart antenna or cel-fi booster, 14.4% use a landline service via a radio tower and 12.4% have a voice communication service over nbnTM Sky Muster. Around 8% use a mobile phone connected to their home Wi-Fi & internet service (WIFI Calling / VOWIFI) and 7% have access to a NGWL (Next G Wireless Loop 3G) for their voice calls. Five percent of respondents voice communication service is via nbnTM Fixed Wireless and 3.3% have a voice service via a Third Party VoIP Provider. The remaining 6.7% have access to a satellite phone, a service via nbnTM fixed line (FTTP, FTTN HFC etc.), a service via Alternative Fixed Wireless or Fibre Provider (not nbnTM) or via Sat Sleeve attached to their mobile phone. The large number of multiple responses (n=3875) indicates that many participants have more than one voice option available to them.



Table 1: Respondents type of telephone voice communication service accessed at their home/residence

	Frequency	Percent of
		Cases
Service via traditional copper cable	1350	63.1%
Mobile Phone via the mobile network	944	44.1%
Mobile Phone with the assistance of a smart antenna or cel-fi booster	355	16.6%
Service via Radio Tower - DCRS, HCRC, Radio Phone	300	14.0%
Service over nbn [™] Sky Muster	265	12.4%
Mobile Phone using WIFI Calling / VOWIFI i.e. your mobile connected to your home Wi-Fi & internet service	178	8.3%
Service via NGWL (Next G Wireless Loop 3G)	154	7.2%
Service via nbn [™] Fixed Wireless	115	5.4%
Service via a Third Party VoIP Provider via your chosen internet service	71	3.3%
Satellite Phone	65	3.0%
Service via nbn [™] Fixed Line (FTTP, FTTN HFC etc.)	48	2.2%
Service via Alternative Fixed Wireless or Fibre Provider (not nbn™)	23	1.1%
Sat Sleeve attached to your mobile	7	0.3%
	3875	

To establish which types of voice option respondents have when they have more than one option, a cross tabulation was completed using the respondent's individual record number and the type of telephone service accessed at their home or residence. The results show that 38.7% of respondents have one type of voice service at their home/residence, 44.6% have two types of services and 13.7% have access to three types of voice communication services at their home or residence. Two percent of respondents have four types of voice communication services and less than 1% have five or six types of voice communication services at their home or residence.

The majority of respondents with two voice services have a copper cable (n=632) and mobile phone via the mobile network (n=537). For those with three voice services, the majority have a copper cable (n=211), a mobile phone via the mobile network (n=194) and a service over an nbn[™] Skymuster service (n=104). Of those that have four voice services 36 respondents have a voice service via copper cable, 31 respondents have a mobile phone via the mobile network, 26 respondents have a mobile phone with the assistance of a smart antenna or cel-fi booster and 22 respondents are using a mobile phone to use WIFI Calling / VOWIFI. The respondents using five or more voice communication services (n=11) did not list a traditional copper cable as one of those services. The main voice communication service for these respondents is a service via NGWL (Next G Wireless Loop 3G), a mobile phone with the assistance of a smart antenna or a satellite phone or mobile with a sat sleeve attached, see Figure 3.



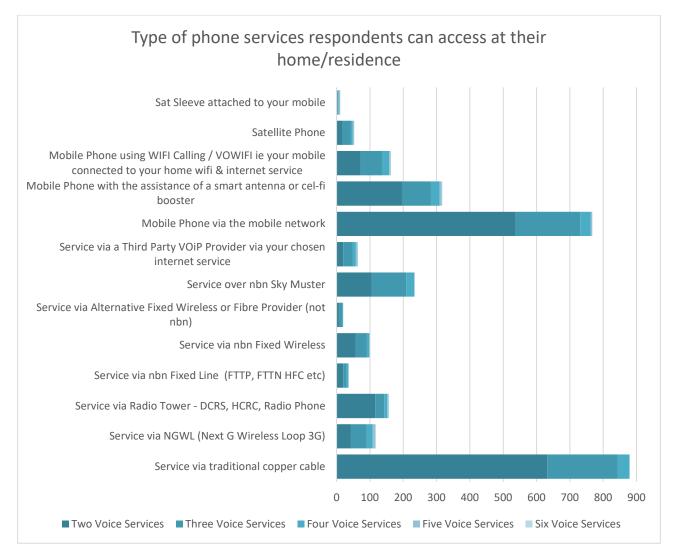


Figure 3: Types of voice option respondent's access from their home/residence when they have more than one option

Question five asks "What type of telephone do participants use for their main voice communication at home?" A frequency analysis shows that 65.23% of participants are using a traditional landline (Copper, HCRC and NGWL) as their main voice communication tool. The remaining respondents are using a mobile via the mobile network (19.8%), or with the assistance of boosting equipment (5.9%), an nbnTM Fixed Wireless voice service (1.6%) or an nbnTM Fixed Line Voice Service (0.8%) as their main voice communication tool. Around 1% are using a service over Skymuster or a satellite phone as their main voice communication tool. Less than 1% are unsure of which is their main voice communication tool and 2.6% selected other, see Table 2.



Table 2: Type of main voice communication at participants home

	Frequency	Percent
Service via traditional copper cable	1069	49.6%
Mobile Phone via the mobile network	427	19.8%
Service via Radio Tower - DCRS, HCRC, Radio Phone	272	12.6%
Mobile Phone with the assistance of a smart antenna or Cel-fi booster	128	5.9%
Service via NGWL (Next G Wireless Loop 3G)	64	3.0%
Mobile Phone using WIFI Calling / VOWIFI i.e. your mobile connected to your home Wi-Fi & internet service	37	1.7%
Service via nbn TM Fixed Wireless	34	1.6%
Service via a Third Party VoIP Provider via your chosen internet service	22	1.0%
Service via nbn [™] Fixed Line (FTTP, FTTN HFC etc.)	18	0.8%
Service over nbn [™] Sky Muster	12	0.6%
Satellite Phone	9	0.4%
Unsure	5	0.2%
Service via Alternative Fixed Wireless or Fibre Provider (not nbn [™])	2	0.1%
Other (see below)	55	2.6%

Figure 4: Map showing the survey participant's and their main form of voice communication



Other options for respondent's **main voice communication** tool include using a combination of tools listed in Table 2, see below for supporting anecdotal comments:

Table 3: Anecdotal comments about options for participant's main communication tool

"Usually rely on traditional copper cable. However since this has been non-functional, we have had to rely on unsatisfactory mobile phone connections when making calls from home"

"Incoming calls via fixed copper line, step outside to use mobile"

"Both the above ticked are both very variable. The Copper Cable is nearly beyond fixing and the Cel-Fi Booster drops out constantly. Extremely frustrating. No mobile service otherwise and then only sometimes with the Booster."

"With the continual drop outs NBN is not reliable when it works we use the home phone when it doesn't we have to rely on the mobile"

"We have been waiting for 6 months for a Telstra landline to be installed. The nbn phone (satellite) is unusable due to delay and echo. "

"I am actually not sure what the hell is used out here!!!! Our fixed line, internet and mobile all come off the same tower. If I have a fault I ring RRadio."

Question six asks participants "How they would rate their primary voice service?" Forty four percent of participants rated the **cost** of their primary voice service as average (18.9% rated cost as poor and 5.7% rated it as extremely good). Thirty seven percent of participants rated **customer service** as average, 36.5% rated **fault rectification** as average and 32.9% rated the **delay** as being average. Nearly 32% rated the **voice quality** of their main voice communication tool as average and 29% rated the **reliability** of their main voice service as average. Participants were also asked to add other comments about how they rated their primary voice service, 462 participants left comments.

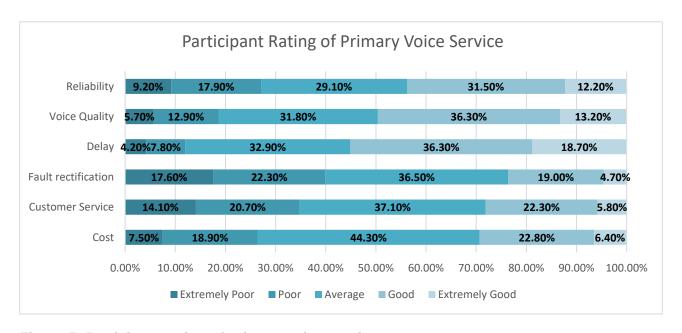


Figure 5: Participant rating of primary voice service



Leximancer 4.5 (see http://info.leximancer.com/) was used to explore the concepts within the unstructured comment text **Question 6**, which **asked how participants would rate their primary voice service**. Five main themes emerged from the comments left by participants about rating their primary voice service), identified in the Figure 6, which also shows the concepts under each theme. These concepts are discussed further below.

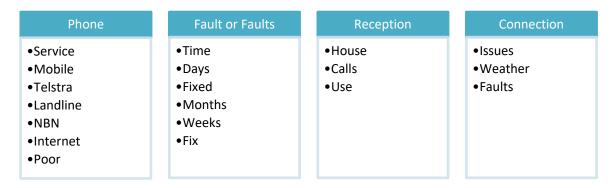


Figure 6: Themes from participant rating their primary voice service

Concept 1: Phone

In terms of service, statements surrounded copper landlines being unreliable in power outages, and caution about joining nbnTM voice services due to poor installation, expensive plans and unreliable service (across several nbnTM technologies). Several comments stated difficulty in ordering a landline service, or getting a previous service reinstated. Comments about mobile voice service mostly surround not having access to a reliable mobile service and for example technicians leaving a message on mobiles for installation and repairs when the respondent does not have mobile service. Statements about Telstra were mostly negative in terms of poor service surrounding the systems involved in fault fixing and offshore customer call centres, however, they were positive in terms of the technical staff, see Table 4 for supporting anecdotal comments.

Table 4: Anecdotal comments from participants about how they would rate their primary voice service on themes service, mobile and Telstra

Phone: Service, Mobile, Telstra, Landline, NBN, Internet, Poor

"When our state lost power, copper landlines were the ONLY reliable source of communication! Businesses within the township that have tried to connect to the NBN (tower only 1km out of the town) but after 3 months+ of no phone in a mobile phone black-spot area, not to mention loss of business (local hotel and Post Office), were finally granted permission to gain access to the copper service once again"

Service

"Our landline phone goes out with the SAME fault about every second month with extremely limited mobile service in our area we are left without a phone for several days. When we ring to report the SAME fault we have to go through the same 20 minute 'testing the fault' rubbish to establish the same issue as 40 days previous"

"Sky Muster isn't an option because we can't get any inclusive phone plan as Telstra doesn't offer anything on satellite. We have been warned off Sky Muster, even by NBN trained technicians but even if we were to take it up we would be severely disadvantaged because we can't get the same phone/internet package as we have with Telstra which incorporates landline calls and calls to mobiles"



	1
	"The NBN service is totally unreliable. It drops out for days at a time. We are in our 80s and rely on the phone for our health and safety. Our children live interstate and are extremely distressed when we cannot be contacted for days at a time. In fact, last month's phone bill was waived in recognition of the fact that we are simply not getting the service we pay for"
	"There is NO reliable mobile phone service at my residential address. A fixed old fashioned landline is essential, literally life and death"
Mobile	"Sometimes weeks without phone working; appointments for technicians to visit/repair are broken without notice or apology; fault often recurs within days or weeks. Despite my multiple advice to the contrary, Telstra leaves messages (re landline faults etc.) on my mobile phone which I cannot access at home"
	"We are only 35 minutes from Noosa Heads yet we are unable to access NBN or use a mobile phone with any certainty. We rely almost entirely on our landline/ADSL service"
	"Fault rectification would be poor or extremely poor after the last effort by Telstra that categorically stated the fault was internal and our problem to have fixed. The next time Telstra were working in the same pit fixing someone else's problem our phone service started working againafter 4 months of no service, as we couldn't afford to call in a contractor to fix the fault Telstra said we had"
Telstra	"How come Ergon can repair our pole (struck by lightning) in the pouring rain in the middle of the night within 5 hours of the storm and it takes Telstra a week to get here. We do not live in a mobile service area so our land line phone service is an important service to us"
	"Telstra is a NIGHTMARE to contact. A phone call to them will take the good part of a morning and when you FINALLY get off hold you can't understand the person you're speaking to because they aren't even in Australia! "
	"Finding out information on NGWL plans and services is almost impossible, Telstra call centers rarely know what you are talking about"

Comments about landline include copper cable and other forms of traditional phone lines. Themes surround paying for an expensive service that is hardly used, but cannot be disconnected in case of other voice service failure. Needing landline as the alternative is unreliable and inequitable alternative services, see Table 5 for supporting anecdotal comments. The data further supports concerns about losing their copper based voice service.



Table 5: Anecdotal comments from participants about how they would rate their primary voice service on themes landline, nbn^{TM} and internet

Phone: Ser	vice, Mobile, Telstra, Landline, NBN, Internet, Poor
	"Are paying for a landline phone that we probably hardly use but are not game to relinquish as mobile service can let you down"
Landline	"No landline currently intermittent service Complaints via Telstra very difficult to get through We are often offline with no service once for 3 months Very patchy mobile coverage despite Telstra map saying we are covered. Only coverage for mobile when electricity is on and after payment for Yagi aerial and smart antennae"
	"We absolutely need a landline, and desperately need something that is reliable. We don't have any mobile coverage at all in our valley/region (Yaouk) and twice have needed to phone for an ambulance in a critical emergency, both times using the landline"
	"Even our landline has been going off for hour's even days at a time lately. So no landline, unreliable mobile coverage and expensive internet it is extremely frustrating"
	"Please don't get rid of the copper cable, rural mobile reception is terrible and when the fires came through my farm, we couldn't contact anyone via mobile or internet"
NBN	"We have no phone or internet services when there are power outages in town. NBN virtually forces you to have a mobile service in case of emergencies which is partly fine if you have reasonable mobile coverage"
	"Constant problems with Wi-Fi internet and mobile reception dropping out and being unable to connect calls via mobile"
	"Very poor!!! Why should I have to spend thousands of dollars so I can get any sort of phone service as well as internet?"
Internet	"Without the landline we would be left with virtually no voice service or internet. We were tested for NBN fixed wireless but we aren't able to receive the signal due to vegetation"
	"Cost of mobile & internet access is not necessarily cheap - we are using technology more & more so usage is greater than cost increases. Customer service from Telstra has always been excellent & the service has been generally quite reliable"
	"During EVERY wet season we lose phone connection for sometimes over a week at a time, this is possible life threatening as we also loose internet during the same season so have no communication with the outside world if an accident were to occur we would have to hope that we can get a satellite signal in order to phone for emergency help"



The theme poor extends to a lack of technicians, only having access to a poor alternative for voice communication and having to accept an expensive connection to a landline due to poor mobile service, supporting previous comments.

Table 6: Anecdotal comments from participants about how they would rate their primary voice service on the theme poor

"When I say poor that is only a reflection off the lack of technicians that we have to cover an extremely large area. The techs themselves are great fellas"

"Have waited 17 years for Telstra to repair our services!! Only use unreliable Telstra 3G service now which is of extremely poor quality!"

Poor

"It is very expensive but we rely on it as we have poor mobile reception in the home"

"Landline is vital and good quality (most of the time) because our mobile service is SO poor"

"Resort to [message] bank on mobile as landline is only working intermittently - this is difficult too as poor reception via mobile network even with booster"

Concept 2: Fault or Faults

In terms of the theme fault or faults, nearly all of the statements surround the time it takes for the service to be fixed. Respondent comments show that participants are frustrated with the time it takes to fix their service when they lose it. Many of the responses identify simple fixes once their call has been answered, however, some comments also reflect rescheduled appointments and frustration about offshore call centres and a lack of local knowledge. In some cases, survey participants are waiting weeks and months for their service to be repaired. The comments highlight in many cases the danger of not having access to a landline in case of accident, illness or in the fire season.

Table 7: Anecdotal comments from participants about how they would rate their primary voice service on themes time, days, fixed, months, weeks and fix

Fault or Faults: Time, Days, Fixed, Months, Weeks, Fix

"We have lost our landline connection 3 times over the last 12 months. Each time it took over 2 hours just to be able to report the fault"

"There is long delay when dialling, delay when speaking, can't access last number called, or *10#. A lot of the time only gives 2 to 3 rings before being cut off"

"Bad service, rectification either non-existent or takes a long time"

Time

"Each time we need a Telstra repair, we call a politician to get any service"

"Fault fixing is slowly getting longer each time to be rectified e.g. five years ago was better service than today"

"It also is very frustrating that technicians have to go back to base in between visits, rather than planning their own trips to save time (and money) on repairs and quicker service to customers. Having someone in an office dictating where technicians go, without question or regard to the technicians requests or local knowledge, is ridiculous!"



"The service is pathetic- overseas Telstra are a waste of time. The plans we have to have are expensive"

"We have had many issues in the past... sometimes with up to a month of NO PHONE at all. In recent times Telstra have been accessible and now stock parts in Australia which quickens down [shortens] time"

"Approximately half of the time we do not get any phone service (with the booster), we have no phone service whatsoever without the booster"

"We are in our 80s and rely on the phone for our health and safety. Our children live interstate and are extremely distressed when we cannot be contacted for days at a time"

"We waited 2 months for a technician to repair the line. He basically described it as frayed and warned us not to leave it so long next time (not that we had a choice) because there were no lines left and they would have to excavate"

"Majority of months we can't service our phones for at least 2 weeks intermittently. We don't have the time to fight and argue with the providers and they are not interested in trying to fix the constant lack of service"

"The biggest problem is getting someone who speaks English, then it takes to two hours to try and tell them your mobile don't work at home and you have had to drive half an hour to get signal, and you do not want your landline forwarded to your mobile. Took four hours one time to get them to understand that there was a noise on the line and we could not dial any number"

"Took 4 weeks and multiple calls on hold for long periods of time each time telling me the line is unstable and finally when a technician came and checked the line he finds the plug in point has suffered a lightning strike. Why does it take so long for a technician to be brought in"

"As the Landline is our only permanent and reliable way of communication when the local tower is off line the restoration time is not priority with Telstra. In times of accidents or illness it is of concern"

"Even our landline has been going off for hour's even days at a time lately. So no landline, unreliable mobile coverage and expensive internet it is extremely frustrating"

"We have no choice but to use Telstra and service is abysmal. We had to fight for over 6 months to get a landline (most of the time they told us they couldn't progress because they couldn't reach us by phone ..."

"Telstra is the ONLY Mobile provider. Our tower has faults all the time and it takes days to get fixed"

"Constantly drops out. Gives engaged signal for days at callers end and our end"

"As it is, the NBN VoIP is like the olden days when we only had radios to talk on. One person at a time and you didn't / couldn't say much"

"We have become experts at forcing an earlier resolution, but it still takes 3 to 4 days"

"Faults don't happen very often, but when they do, we can be out for many days at a time"

Days

"Took 16 weeks for him to arrive, was told that would be 7 days. Subsequently Telstra connected line plus multiple numbers, then kept cancelling multiple numbers without authorisation - 4 or 5 times"

"Takes approx. an hour on the phone to TELSTRA to convince them it's not our handset, then we run through the same tests. Wait 2-3 days for a technician who fixes the same problem again and tells us how crappy the line is"

"The NGWL is a good service the main downside is the data amount and the price. Also 5 days of cloud and we run out of service due to flat batteries but i an not all that keen to change to satellite/nbn due to all the problems some are having - we were on Bigpond satellite prior to going to cdma wireless loop"



"When the tower is functional, service is fantastic. But, when it goes out, it can go out for days before Telstra sends a tech to the site (& then it's up again in under an hour, generally)"

"Connect to a rural exchange (Bungundarra) which has continual faults. Can take anywhere from 7-21 days for faults to be rectified"

"Telstra continually do a quick fix however the problem continues once we have another change of weather. This month our landline has been out for sixteen days"

"Took 10 days for our phone line to be looked at after it was reported not working in February. This was during peak bushfire season, so our only communication was via Skype on the computer with its voice delays and 'brown outs' at times of high usage"

"The tower goes out up to a half dozen times a year, sometimes only for a day but has gone out for stretches of 4 days. We are never notified in advance of any 'planned maintenance'"

"Although my husband and I have life threatening medical problems, delays of days are usual. A major problem is lack of staff, as none of the technicians now know where the copper cable goes to"

"We're connected to an unreliable exchange (Orchid Valley) which fails for days at a time more than once a year. Therefore other lines near to us (farmers kilometres away) also fail and we have to drive to the nearest town, 40 km away) just to report the fault"

"Sometimes weeks without phone working; appointments for technicians to visit/repair are broken without notice or apology; fault often recurs within days or weeks. Despite my multiple advice to the contrary, Telstra leaves messages (re landline faults etc.) on my mobile phone which I cannot access at home...."

"Our landline phone goes out with the SAME fault about every second month with extremely limited mobile service in our area we are left without a phone for several days. When we ring to report the SAME fault we have to go through the same 20 minute 'testing the fault' rubbish to establish the same issue as 40 days previous"

"We have waited over 54 days for our phone line to be fixed. There have been several times over the past 10 years that days / weeks have passed before our phone lines have been fixed (after a fault has been reported) This is the ONLY phone service we are able to connect to"

"Landline currently out of order Supposed to be fixed last week but now rescheduled for the end of next week Telstra have been reasonably helpful and apologetic"

"Gives garbled underwater sound so makes it impossible to have a conversation. Because Telstra can call us on occasions and it works they say the problem is fixed"

"My nbn fixed wireless equipment is failing and drops connection every couple of minutes and I can't get it fixed as I can't get past my ISP to get to nbn to replace the NTU / ODU pair"

Fixed

"Kept being told there was nothing wrong and the noise was just a 101 message. If you're lucky enough to get someone who speaks English 9 times out of 10 things get fixed quickly"

"Also the reporting of the landline out has to be done by emailing a relative on our behalf to provide constant badgering to get the line fixed or having to drive 200kms to town to see Telstra Country"

"Home line has an error, cannot call certain numbers. Complex error which has never been encountered before by Telstra, and hence has not ever been fixed"

"I only deal with Telstra because I have to in order to get faults fixed. If I had a choice I would switch service providers"

"Main phone had been out for 2 months in total was fixed but lasted 3 days"



"In the last 6 months, since Telstra 4G has been available (I use fixed high gain antennas much as would an nbn fixed wireless service), the service reliability has been excellent"

"Our main issue is vermin & weather in an old exchange. Gets very tiring going through an overseas call centre & process again & again for the same issue when if I could ring the local technician direct he can have it fixed within a day...."

"Should we be FORCED onto the NBN we will lose access to voice communication as the protocol being offered by the NBN in our area, is via a sub-standard fixed wireless service. The fixed wireless service here is utterly unreliable, as it drops out constantly, and has very limited up/download speeds, coming as it is from a television transmitter"

"In March 2017 we were without a landline for nine (9) weeks before Telstra fixed the problem. A mobile and a Wi-Fi modern were provided, but neither worked reliably for the duration"

"Only recently had nearby mobile towers installed. These are much more reliable than our old fixed line which we cancelled"

"Phone goes out of order every year at least once. This year it stopped working on 3rd January. I reported it on Jan 22nd and it's still not fixed"

"Prolonged periods between reporting of phone being down and fault being fixed. Phone was out for majority of January and all of February. Extremely difficult to hear phone calls"

"Being a locality with a sparse population and also being located over 6km from the Telstra node our line has always been of poor quality. We are not a priority. my phone cable sat above ground for 6 months, cable tied to a pedestrian barrier until it was 'fixed' "

"There is NO reliable mobile phone service at my residential address. A fixed old fashioned landline is essential, literally life and death"

"Honestly poor reception is such a part of life here we just alternate mainly between the mobile and sat phone the Nbn fixed line was meant to be our main point but it's a joke"

"When there's a power outage we lose access to the internet. Accordingly, if the Federal Government was to remove access to the fixed/copper line as proposed, we would be left without a telephone service at these times"

"Two months of frustration dealing with Telstra call centre staff who were handicapped by imperfect English and no knowledge of local conditions"

"It wasn't till I contacted a friend in TELSTRA and he told me alarms had been going off for almost 2 months on my service that they sent a techie out. Turned out to be an illegal repeater not far away"

"Still waiting for connection 1 month after putting in for said connection. Have got confirmation of new connection but will not be done till the 13th of March that makes it 2 months!"

Months

"The nbn has been off more than it's on, in the past two months. There is never any communication"

"Ben out for 1 month now, (3rd time in 8 months.) Needs new radios but they are at least 3 weeks away from supply, then have to fix it"

"My copper landline is due to be turned off in the next few months. So were have been forced to switch entirely to wireless NBN"

"Our landline phone has been out continuously for 3 weeks and very ordinary for 4 months prior"

"The NBN has only been connected 4 months. Town NBN loses the copper phone and ADSL services in Nov 18 so we really have no choice but to changeover"



"We live one hour from southern Canberra. Previously we have had phone landline outages for over 4 months with no phone access at all"

"After 4 months we final got NBN after jumping though legal red tape and only one provider would try to help us get NBN. After we hooked to fixed wireless NBN at two bars of service, Telstra came and pulled our fixed copper service"

"We waited 2 months for a technician to repair the line. He basically described it as frayed and warned us not to leave it so long next time (not that we had a choice) because there were no lines left and they would have to excavate"

"It took 18 months to rectify a fault with the cable where Telstra had previously strung a 400 metre repair section along a neighbour's boundary fence that would continually get knocked down by kangaroos, emus and chewed on by other animals. They would send out repairmen to fix the cable every couple of months but took them 18 months to send a crew to put it back underground"

"Last year we were without telephone service for 3 months due to delays in repairing lines mainly damaged by trees. This year we were without internet for a further 6 weeks due to NBN installation stuff ups to our existing ADSL service"

"Majority of months we can't service our phones for at least 2 weeks intermittently. We don't have the time to fight and argue with the providers and they are not interested in trying to fix the constant lack of service"

"We had a fault at our outstation which took over 6 months to resolve, in which time they never had a phone at all which poses a considerable safety issue and we were never refunded for the bills we paid in that time, despite making numerous requests and that being a promise from our provider"

"We have been waiting 6 months for a Telstra landline to be installed as the nbn phone line is unusable due to echo, drop outs and delay. We are relying on one mobile which can access Wi-Fi calling but that is even unreliable and only slightly better than the nbn line in regards to echo, drop outs and delay"

"Our phone works intermittently, at times it has not worked for 6 months waiting on parts. Our mobile service is sporadical at best as we are 88km from the nearest tower and rely on a smart antenna attached to a multidirectional antenna"

"2-4 weeks outage is common. Telstra always apologises but does nothing"

"Faults can take 2 or 3 weeks to fix, Linesmen & Techs. have to drive minimum of 340k - 700k + depending on road conditions"

"Installation quoted at 14 days - took 18 weeks. I had to provide trench from pit to house, but not allowed to dig until Telstra tech decided where"

"Took 16 weeks for him to arrive, was told that would be 7 days. Subsequently Telstra connected line plus multiple numbers, then kept cancelling multiple numbers without authorisation - 4 or 5 times"

Weeks

"No CSG or USO so we are only repaired when there are no other jobs for customers with a CSG/USO. Have waited weeks and weeks for a technician at one of our isolated properties with no mobile coverage and wife 8 months pregnant with other little kid did"

"We have been without a phone for several weeks this year already. Fault technician is friendly and efficient when he gets here but Telstra's programming of his schedule is woeful and there needs to be more than one of him"

"Five weeks to replace the radios last time, which meant no phone as the nbn phone has such a long delay and only one person can speak at a time that makes it impossible for real communication. And we need to be able to have real communication, with our loved ones, with the Dr, with counselling services, with our businesses"



"Due to only 2 houses being on our line any faults take weeks to rectify. There is a distinct lack of understanding that our home phone line is our only reliable form of communication where we live"

"Sometimes weeks without phone working; appointments for technicians to visit/repair are broken without notice or apology; fault often recurs within days or weeks. Despite my multiple advice to the contrary, Telstra leaves messages (re landline faults etc) on my mobile phone which I cannot access at home...."

"Fault rectification would be poor or extremely poor after the last effort by Telstra that categorically stated the fault was internal and our problem to have fixed. the next time Telstra were working in the same pit fixing someone else's problem our phone service started working again.....after 4 months of no service, as we couldn't afford to call in a contractor to fix the fault Telstra said we had"

"Telstra is hopeless and can never help. Even the fix is always a patch fix and same problems continue"

"But we rarely we make it a week without drop outs let alone a month. Telstra doesn't have the staff to fix it"

"We have issues because nobody really understands our service set up, we end up going around in circles with them saying that if Telstra have to come out they will charge some exorbitant fee to fix it if the issue can be traced to us rather than their equipment. And when it isn't working we have no way of talking with them because the phone doesn't work"

"It took 6 weeks to fix fault which meant NO communication available"

"Once it took 3 weeks to fix as there were other customers with faults in our area and (unofficially) Telstra customers get priority"

"When I have problems with my phone connection, the call centre people tell me all is fine, while it is not. It's taken 2 years to fix a problem with I had to identify to a remote technical engineer, once it was scaled up enough, it was fixed in a few minutes"

"It has taken multiple WEEKS to get these lines back up because the faults are in the tower sections - and the old equipment and no-one can fix it, we have to wait for someone to come. One fault caused a power spike in the phone lines that destroyed our business phone system, so \$10k for a new phone system because the lines weren't protected from a surge back along the phone lines"

Concept 3: Reception

Anecdotal comments about reception around the house highlight issues that respondents face when trying to answer telephone calls in their home. Many comments highlight poor mobile signal and poor line quality. Comments for the theme calls relate to calls dropping out, going directly to message bank, static, weak signals and long time frames for repairs. In terms of use, participant comments raise issues about the cost of service, customer service, reception and the drop outs or instability in the connections, see

Fix



Table 8: Anecdotal comments from participants about how they would rate their primary voice service on themes house, calls and use.

Reception: House, Calls, Use

"Wish we had good old land lines, but cost too much to set up to our house"

"Coverage is the issue. Phone rarely works inside the house"

"Depending where in the house I stand I can make voice calls. Amaysim don't offer VoWiFi (despite Optus - their provider - offering it) which would help"

"No mobile signal on property at house"

"Our house is pretty good but I lose service (there are black holes) within 10 metres drive to and from any town around us - in all directions"

"Service inside my house (on a rural residential property, less than 20jm from Parliament House in Canberra) is good with lots of my own money spent on private infrastructure. It's extremely poor outside the house and along 8km of road leading to my house"

"Half a bar service in the house, 2 bars outside"

House

"Installation quoted at 14 days - took 18 weeks. I had to provide trench from pit to house, but not allowed to dig until Telstra tech decided where"

"No power means no phone. The other day when all the storms around [Feb 2018] we had no house phone and no cel-fi for 42hrs"

"So much background noise it is impossible to hold a conversation so need go outside of house to sit on log to use mobile"

"Offer to transfer calls to a mobile that does not work in the house is almost useless"

"My Telstra mobile works only in a few spots - a window sill at the front of the house and one area of the front veranda. If I go out onto the property there's no service at all"

"We used to get reasonable mobile service in the house and text were good .Text service now terrible and calls not much better"

"We need to tell visitors or people delivering goods that their mobile service will drop out 20km from the house, and if they think they are lost simply keep driving to the end of the road (where we live). Many times people panic and turn around!"

"Most calls 'fail' "

"Most calls are charged at STD rate"

"Common problem. Incoming calls are not received. receive a "message" of an attempted call about half an hour later"

"Landline is main number called in for business and private calls and only number listed in phone directory"

Calls

"Landline is unreliable and continues to be faulty during change of weather conditions (wet weather, hot temperatures). Fault does not allow us to make or receive calls"

"Our exchange is extremely old. No access to caller I'd or anything other than straight calls"

"When wet calls can be noisy. Landline is our only form of telecommunications"

"This would potentially be a dangerous situation if static was present when emergency calls needed to be made, especially if the power was also out and NBN unavailable (common in storm situations)"



"The kids utilise VOIP for their education, but it is not used for general or business phone calls as the delay and echo is frustrating"

"Constant problems with Wi-Fi internet and mobile reception dropping out and being unable to connect calls via mobile"

"I have a sat phone so could do test calls. Telstra still insisted there was no problem and wouldn't send a techie out"

"Prone to power outages. Multiple 2 hour phone calls to Telstra operators required to get response"

"Tech help is impossible as they do not understand the language or the problem no matter how many times they are told. Phone, on a regular basis, does not ring with incoming calls instead it goes straight to message bank"

"Prolonged periods between reporting of phone being down and fault being fixed. Phone was out for majority of January and all of February. Extremely difficult to hear phone calls"

"Primary voice service is mobile network, but this has a weak signal in our house for some reason (we are basically in the middle of town). So quite often my phone chooses Wi-Fi calling to make calls"

"All phone packages on Sky Muster charge calls to landline and mobile numbers separately which works out to be far more expensive than the \$90/month we currently pay Telstra for unlimited ADSL plus all phone calls"

"As Wi-Fi calling is main phone, dependent entirely on Sky Muster and power supply. Questions about cost, customer service and fault rectification are difficult to answer, don't know how much data phone calls use, gave up complaining about NBN failures long ago, I've got used to slow speeds at times, huge latency occasionally and it just not working when I need it"

Use

"We have only one bar of mobile phone coverage and our fixed nbn phone line drops out no one can call in on the fixed line nbn because I never pick up the calls and our NBN router drops out up to five times a day and drops out in the middle of phone calls 8 out of 10 times. If we have an emergency were stuffed as we cannot call emergency services. One of us has to drive to a mobile coverage area to call. also when we applied to get our phone on Telstra refused to hook up the copper land line say there was no copper service to our farm and we are not in a Skynet service area"



Concept 4: Connection

Statements surrounding connection focus on issues relating to the service not working, the service provided and contact with overseas call centres. The statements identify weather as an issue for voice communication. In terms of landlines, water causes issues with the connection quality and in terms of all voice communication, the weather has a large effect on participant's connection and the time it takes to have the service repaired. Comments about faults again highlight frustration with non RRR residents troubleshooting for those in RRR areas, claiming frustration with the time it takes to get the lines fixed and the lack of maintenance provided for voice connection services.

Table 9: Anecdotal comments from participants about how they would rate their primary voice service on themes issues, weather and use

Connection: Issue, Weather and Use

"Local Telstra Shop staff are excellent and help out on any issue relating to communications"

"Call centre operators are very slow comprehending the simple issue"

"We have had one issue with it not working. Tech support were fantastic and it was fixed with a reboot"

"Telstra wouldn't connect me citing "unspecified issue" (even though my neighbour is with them). I'm with Skymesh who presumably use Telstra infrastructure anyway"

"We have had ongoing issues with our phone over the past few years. Repairs take a long time to be resolved, sometimes several weeks and it is never long before we have the same issue again - a loud harsh intermittent buzzing that makes conversations impossible, or no signal at all"

Issue

"We haven't had an issue on our landline for a while, and it will work in a blackout (which we frequently get), so we definitely need to keep this reliable service"

"It's VERY difficult to get the overseas telephone fault people to comprehend your phone issues as it's ALWAYS an exchange/line fault with our exchange, NEVER a handset fault or anything we are responsible for. It's also very very difficult to get these people to comprehend that several people on the same branch line are also out, meaning it's not just my line's issue"

"Lucky we have had a contact in Telstra to email to say it was a large issue often effected mobile tower backup and neighbouring exchanges too. As most people do not have any way of notifying Telstra their phone is out and then it only goes to outsourced phone call centre anyway"

"Pits are exposed to all weather elements"

"Drops out with wet weather"

"Unreliable in wet weather"

"The quality is still poor especially in wet weather"

Weather

"Landline is unreliable and continues to be faulty during change of weather conditions (wet weather, hot temperatures). Fault does not allow us to make or receive calls"

"When wet calls can be noisy. Landline is our only form of telecommunications"

"Our landline, our only way to communicate on our property, rarely works after rain. At some point it is exposed to the weather and does not work when wet"



"Rectification and problems often weather dependent with significant storm activity and rain activity throughout parts of the year"

"If there is bad weather the phone goes off and there is no way to communicate. In good weather it's all good"

"Our main issue is vermin & weather in an old exchange. Gets very tiring going through an overseas call centre & process again & again for the same issue when if I could ring the local technician direct he can have it fixed within a day...."

"The weather effects signal significantly. If there is a power outage the smart antenna no longer works so landline is required to contact origin energy/ emergency services"

"Telstra continually do a quick fix however the problem continues once we have another change of weather. This month our landline has been out for sixteen days"

"Our closest full time neighbour is about 5 kilometres away but her phone is often affected by the same weather event. We have to drive about 30 kilometres to get a reliable mobile phone signal that doesn't drop out"

"Telstra faults is extremely frustrating for rural users. Long delays identifying faults and rectifying"

"Phone line is not maintained and Telstra advise they can see faults but too costly to repair"

"Rectification of faults can take up to ten days depending on what needs doing. Generally done within 2-3 days and the radio unit crew in Brisbane are particularly helpful"

"When the tower has faults, it's takes out all mobile, landlines, adsl. The local stores eftpos also doesn't work"

"They have cut the number of technicians in our area so they have more area to cover which means longer time for faults to be repaired"

"Connect to a rural exchange (Bungundarra) which has continual faults. Can take anywhere from 7-21 days for faults to be rectified"

Faults

"Phone is reliable with not many disruptions and most are caused by lack of maintenance of systems batteries by contractor some faults caused by gecko's frying on cards at tower causing shorts. Cost of satellite connection and allotted 5 gb insufficient to business"

"Simple line faults are generally fixed pretty quickly. Major ones (involving a locality rather than individual line) have been slow with very bad notification and communication from Telstra"

"Telstra is the ONLY Mobile provider. Our tower has faults all the time and it takes days to get fixed"

"Faults are frequently caused by lightning storms, the exchange is aged & repairs are temporary, we have been informed the amount of money required to prevent this recurring issue will not be forthcoming, so we expect to continually have service disruption"

When asked to rate their current primary voice service compared to telephone service 10 years ago, 49.4% selected that it was about the same, 12.4% said it was better or much better and 34.6% of respondents said it was worse or much worse. Those who selected N/A did not live in rural, regional or remote areas 10 years ago or were using a different technology previously, see Table 10.



Table 10: How respondents rated their current primary telephone service compared to 10 years ago

	Frequency	Valid Percent
Much Worse	274	12.7%
Worse	472	21.9%
About the same	1064	49.4%
Better	178	8.3%
Much Better	89	4.1%
N/A	77	3.6%
Total	2154	100%

Participants were allowed to write comments to support their answers. Themes from the 294 comments include service, coverage, phone line, Telstra, area and problems. A cross tabulation was performed to identify comments from each of the selection variables. A selection of anecdotal comments from participants is contained in Table 11. The majority of the comments across all selection variables relate to the line being affected, poor service provision, or that they have no voice service when the power is out/affected. There is a large amount of concern about the danger participant's face in an emergency when they have no access to phone lines for example "I have three little children, how am I supposed to report an emergency with my unreliable communication?"

Table 11: Anecdotal comments from participant about the comparison of their current primary telephone service now compared to 10 years ago

"We used to have landline service during power outage. Telstra has removed the battery from our exchange so we have no phone communication. We don't have mobile reception"

"In February 2018 after a period of severe static on the line, our phone went dead at our end although when people tried to contact us, it sounded as though we were not answering. The ADSL worked so we contacted the Indian Chat/Call Centre, who tested the line and booked a technician, with a vague five (5) day lead time. This technician never appeared, then because the Indian Internet Call Centre could not contact anybody "concerned" in Australia, they were able to reconnect us, albeit with a lot of static, which was to be fixed. The static increased over the next five (5) weeks, until our line is now inoperative again, and we are awaiting a technician with a lead time of five (5) days. Ten years ago, faults were minimal, you could talk to a local call centre and faults were rectified promptly and on the technician's first visit."

Much Worse

"Telecoms services - voice and phone have deteriorated substantially. We are at the same property in Rural Darwin and the phone and internet worked in the house 10 years ago...now need to go outside a lot of the time for the Telstra phone, the Vodaphone is usually better. Both are very, very poor now after the cyclone - have to go out on the front lawn - under the trees that are on horrible angles (they will need to be taken down)...can often only get one bar and can only send short text messages. However, the phone was on for most of the time the cyclone was on and they have maintained a good service I think. When Katherine flooded we didn't have phones, land-lines or mobiles for quite some time. The fixed wireless satellite has mostly been on which is excellent"



"The old copper landlines never failed during a storm or cyclone. The current NBN fails whenever there is a power failure and can take 60 minutes or longer to establish a connection once power has come back on"

"We are at the end of an eight km copper line with multiple breaks, very poor quality and frequent interruptions. Getting Telstra to repair the line used to be very frustrating and lengthy. They have improved their service in the last six months"

"1.no improvements in the service 2.takes a lot longer to get faults fixed 3.takes longer to gain access to a call centre and they are hard to understand (being overseas and non-Australian voice)"

"Analogue and CDMA were far more reliable than the current 4G with regards to mobile coverage, not to mention greater coverage. As for landlines, NBN availability has failed us"

"Our landline (DCRS) is a much better service but the rest of the world's reliance on mobiles and expectations of effective mobile range mean that is what we are called on. It is patchy and drops in and out, is definitely worse than when we installed cel do two years ago. Service with a car kit and long antenna in the paddock is also non-existent whereas two years ago we had coverage across most of our property, with a car kit, and we have trialled different phones and antennas for no improvement. So that has decreased hugely. Apart from safety concerns for lone operators in the paddocks not being contactable, it also definitely impacts negatively on our business. As people ring and when they can't reach us turn to the next source of our product"

"Technicians have been put off for whatever reason and we don't have as many in our local area as we used to. Generally coming from 100km away"

"Telstra black spot mobile program installed a mobile tower 8km away, cannot get reception from this tower and the main tower we used to get reception from 60km away has been turned down making our reception worse"

"Telstra service is terrible. Staff are overseas, cultural differences (listen less to women, have had to have my husband talk to them multiple times as they dismiss me)"

"The first phone I had was CGMA - there is no available landline service without a huge expense. It had better reception and did not require the rooftop antennae. i am on my second phone with the antennae (which I had Telstra Countrywide come and test to see what type was needed). The present phone is somewhat better than the last, but i the 3G network will be phased out and I am concerned that I had trouble finding this phone with the proper antennae port"

"We can only get a reasonable service with Telstra mobile if we go outside! Any other service e.g. Vodaphone or Optus does not work unless we drive off our property about 2km down the road!! Hopeless in an emergency especially fire"

"We used to have a technician based in a town close to us (Leigh Creek) which helped with the lag time between reporting a fault and having it fixed. Was not a centralised system with someone sitting on a computer (with little to no local knowledge) sending a technician out on an ill thought out travel path"

"When we had a copper cable into the house it was OK. The mobile with the older technology had much better coverage than the digital network. Each move (to 3G and now 4G) has reduced coverage at each instance"

Worse



"It was cheaper" "Customer Service and Fault Rectification has fallen through the floor"

"During the Dunalley fires in 2013, the underground copper network was still working in our area, but the mobile towers were burnt. The first thing that happened when I returned to my unburnt house was the ringing of my telephone. No power or water, but I had contact and communication"

"Exactly the same. No mobile phone service (voice) even though a Telstra mobile tower was installed about 7 km away. Occasionally we get some SMS messages on mobile phone placed in high window, but are usually not able to send any SMS messages"

"For any computer-based activity (Tele Health / Children distance-education etc.) that requires (absolutely) uninterrupted service... an (Authentic) fixed line is essential"

About the same

"Have always had poor service even with copper. We were using a "Shared Pair" and for many years the copper was hanging along fence lines and trees across the river. Even the slightest moisture things would go belly-up. Our current VoIP does not always ring and we miss many calls"

"Landline good/ no change. Mobile terrible/ most of property in blackspot. Patchy service with an antenna/booster"

"Our primary voice service (POTS) has not changed - the quality and reliability is the same as it was 20 years ago - totally reliable"

"There are always exceptions though... our old service was via radio service tower. Our upgraded service is Satellite; Solar & batteries. Over the wet season when there is prolonged periods without sunlight, and access to the station (due to the wet) is limited - this is when we experience the worst problems. Batteries loose charge, equipment faults, then even when the sun does appear - the phone does not work as the internal equipment needs attention"

"We have only just got the NgWL so not sure how it will go in extended power out. Have had one issue with it not working. Tech support were fantastic and it was fixed with a reboot"

"10 years ago I had to go home and make a call or wait for someone to ring back, now I have phone range over my farm those days are gone. Had no range inside my house, so had cel-fi installed and it works well, but cost \$2600 installed (aerial, labour, travel, unit)"

Better

"10 years ago we only had the landline and the quality was poor; access to the internet via this service was impossible due to poor signal quality. The mobile with the external antenna provides a much better signal"

"Because I spend thousands to get a booster"

"Digital Smart phones deliver better voice capacity than the old analogue phones. Plus data service i.e. text is very useful when voice is down or not available"

"My copper wire Telstra line kept dropping out, we invested in antenna and cel-fi which is still not reliable, but is certainly much more reliable than copper"

"Had a Telstra tower erected in town, however someone nearby has an illegal booster which affects us occasionally"

Much Better

"I previously used a landline but it was very unreliable - always out with lightning strikes and often a long delay to get it repaired. I spent the money on a Yagi antenna on the roof connected to a smart antenna and will recoup that money from the cancelled landline"

"Our phone used to drop out after every lot of heavy rain due to flooded exchange boxes. This has improved greatly and we're now able to rely on both voice and ADSL. To lose this facility now after basically being excluded from the NBN would be totally unjust"



"We had to get rid of the Telstra landline as it was impossible to use at best and broke down frequently. Also stupidly expensive. If it weren't for the nbn^{TM} satellite, we wouldn't have a working landline"

"We still have landlines, but because mobile service is much better tend not to use landline. Didn't have much mobile service 10 yrs. ago, we are farmers so are not at home much during the day, having mobile service allows us to conduct business during the day, especially for harvest, access to internet in the field. Don't have to come home & do phone calls. Allows greater access to for all aspects of our business lives. Having the landline is good when power goes out - it still works!"

"We used to have a landline only at Grahams Valley NSW. We were without service quite a lot. We moved to Mt Mitchell in 2013 and found that we received a mobile service. We had to add a Cel-Fi antenna. I find that it is not as congenial to have a chat on the mobile as the landline however!"

"Lived elsewhere 10 years ago"

"Didn't have mobile access"

N/A

"Only said 'NA' because 10 years ago I lived in a black-spot with no mobile service at all (totally different postcode) but we did have a landline that functioned perfectly well"

"Was in the district 10 years ago. Power is required for the smart antenna. Without antenna service is unreliable and intermittent"

Question 8 asked the participants if their primary voice service (excluding charging cordless or mobile phones) required power to work. While 31% percent responded 'yes' their primary service needed power to work, 69% responded no. This means that currently, nearly 70% of people will not be affected by power outages when using their primary voice service. Should all voice services be transferred to an alternative (non-copper) service such as current nbn™ Services, then communication during power outages will become a wide-ranging problem, see Figure 7 and Figure 8.

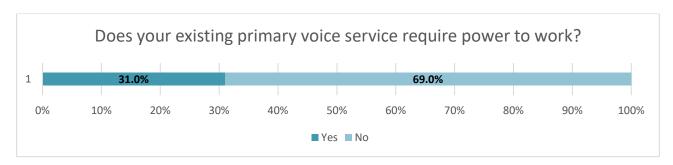


Figure 7: Does existing primary voice services require power to work?

Next the survey asked participants about the power mainly used at their residence. Eighty six percent of respondents rely on mains power, 9.2% on solar and 2.4% on generator power. Nearly 2% have an alternative power source, as shown in Figure 8.



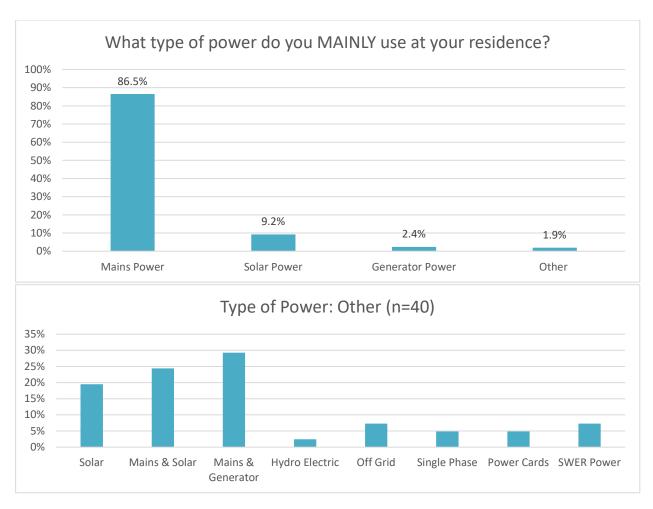


Figure 8: Type of power mainly used at participants residence

When asked if respondents had an alternative power source, 44.7% responded that they did not have an alternative, 40.1% responded that they did. Five percent identified their back up power source as an uninterrupted power supply device and nearly 3% have solar as a backup. This is supported in Figure 8 above, where alternative power is identified as mains and solar, mains and generator, hydroelectric, off grid (gas, fire, battery), single phase, power cards and rural power delivered by a SWER (single wire earth return) line.

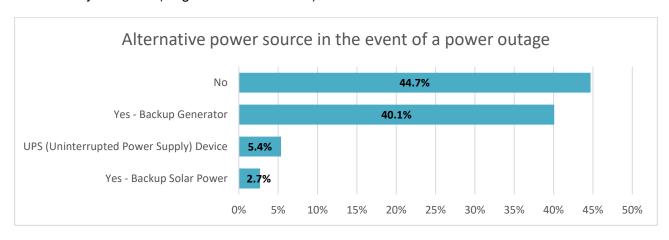


Figure 9: Do you have an alternative power source in the event of a power outage



Figure 10 shows that the main reason respondents primary voice service stops working is weather related (42.2%), followed by faulty equipment (34.2%) and then power issues (19.8%). When asked about other reasons, participants highlighted nbnTM outages, planned maintenance, copper cable faults, service area faults, accidental damage, personal equipment faults, loss of mobile network, provider faults, nature other than weather for example damage by wildlife and congestion.

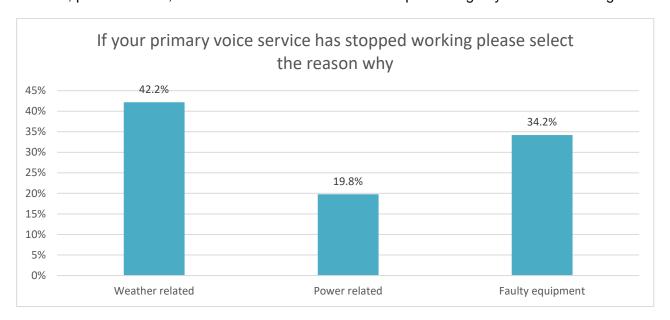


Figure 10: If your primary voice service has stopped working please select the reason why

Twenty four percent of participants selected that it takes 24 hours for their primary voice service to be repaired when it stops working, 21% selected that it takes one week, 20.5% selected 48 hours and 18.1% experienced wait times of between 1 and 4 weeks. Nearly 2% have waited 1-2 months and around 1% have waited more than 2 months.

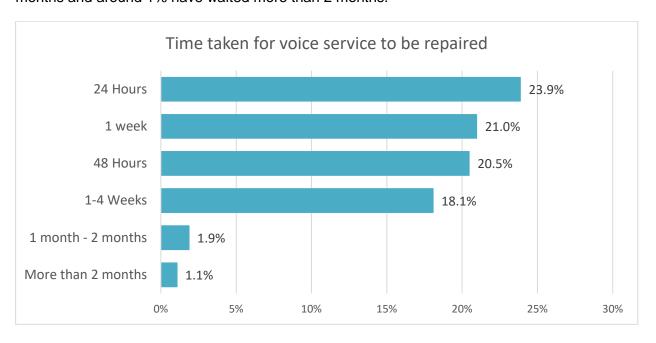


Figure 11: When your primary voice service stops working, roughly how long does it take to be repaired?



Anecdotal comments indicate that some participants have waited for more than 3 months and as long as 4 months for repairs to be completed. Other anecdotal comments indicate that weather, the type of fault and availability of technical staff may increase wait times for repairs.

"At different times, all of the above. The techs fly-in, fly-out from Brisbane and parts are ordered as needed"

"1-4 weeks normally, although I have a priority tag at present due to my Father-in-law, who has since passed away. I tried to cancel it but cannot until its renewal date (3 years)"

"3 visits over 4 months before they got it right"

"Currently unresolved for 4 months - spasmodic at best, must be out in a paddock up a hill for it to be vaguely useful"

"Days some times and 4 days ago it was fixed after complaining in 30 minutes - they were able to fix it from Townsville"

"Depending how long the blackout lasts. We also experience short time faults, when we need to call the Radio faults line and it is often reset from their office"

"Depends on fault type, availability of technicians and access"

"For a copper line fault it can take up to 5 weeks but for a storm only 24 hrs"

"Intermittent and unpredictable. Takes more than a week for service personnel to attend but usually it has rectified itself by then and the problem remains unsolved"

"Not working for over 5 weeks, with no prospects of it getting fixed in the near future. After the 2011 floods, we had problems with the phone for just under 9 months"

"Power related 12 to24hrs. Faults in line average 4 to 7 days"

"Should be 24hr repair as I am on Priority Repair service due to chronically ill person residing with me. Currently without landline for 20 days waiting on repair"

"Temporary repairs 1-4 weeks; more significant repairs many months"

"Used to take approx. 1 week but for the last outage we were down 3.5 MONTHS"

"Worst case nine (9) weeks in 2017, usually five (5) to seven (7) days"



When asked who their provider was for their main voice communication, 84% of participants indicated Telstra as their main provider, 3.3% are with Optus and 0.3% are with Vodaphone. Nearly 12% are with another provider, as shown in Figure 12.

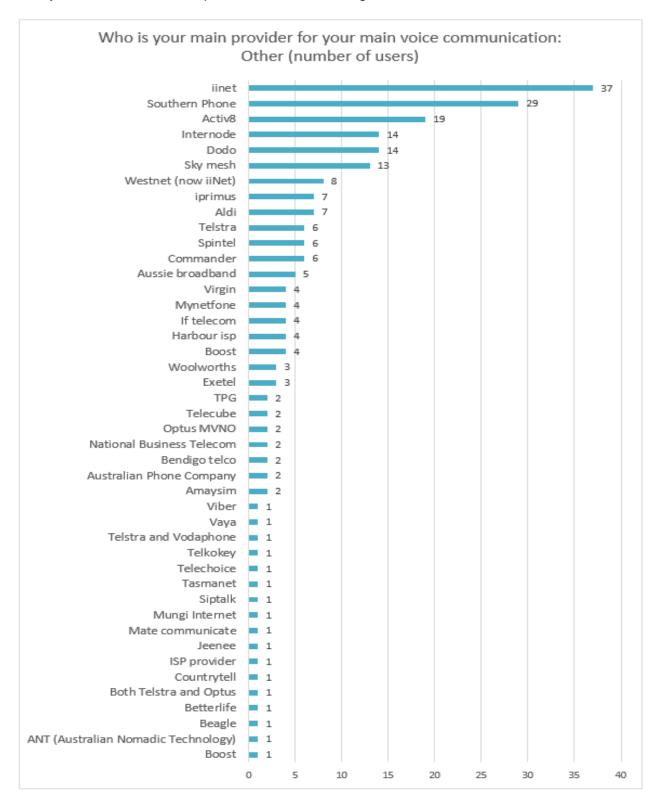


Figure 12: Who is your provider for your main voice communication: Anecdotal comments in other?



Thirteen percent of respondents have tried to order a fixed line, but have been unsuccessful. Participants were asked to comment on why they were unsuccessful, reasons include 'too costly to reinstate', too hard to deal with the installer, and too hard to deal with the telco to have it reconnected. Three hundred and fifty respondents left comments, Table 12 contains a sample of the comments.

Table 12: Anecdotal comments about why respondents could not connect a fixed landline service.

"30 days after we had it disconnected we tried to have Telstra reinstall. We were told there were no available pairs in our area so no phone. 30 Days later a technician was in the area and I told him what Telstra said. I was told there are pairs they are just all faulty and Telstra only upgrades active lines. The tested our connection box and said it was still live but without a phone number attached and heavily static so it would not be viable in its current condition. The technician said it was from the lightning strike that hit the box earlier in the year-we were without telephone for 6 weeks at the time. Apparently they only repaired what they absolutely had too. We tried again 6 months later telling Telstra under the USO we are entitled to a phone. After being connected to no less than 4 people and 2 hours on the phone Telstra agreed. However, they were going to charge for a service technician, a new line to our house and a new connection fee. It was going to cost a minimum of \$300. We do not have that kind of money and cannot afford to hook it back up"

"About 7 years ago the REM was upgraded to adsl compatibility but to do so they had to reduce the amount of customers on the line. took about 3 months of solid petitioning to the ombudsman to get the line reconnected"

"A service at one of our houses on the property was disconnected as the house was empty for a few months. House was the. Occupied by family with young children. Took three months and about twenty phone calls to get it re connected. Appalling and dangerous situation. There isn't any mobile service at the house, which is 35 Kim's from town and 5km from the nearest house"

"Adsl. Too far from exchange"

"After disconnecting for one year due to extended holidays, I asked to reconnect Telstra and claimed I did not have a cable despite having paid them for existing line for 15 years. The only way to reconnect my existing line was to agree to a \$300 fee for installation, knowing that when the tech came out he would find the existing cable. Telstra's knowledge of their own network in the bush is woeful"

"After years of the copper line being repaired and left exposed on fences, trees and the ground for stock to damage we were told Telstra would never dig it underground so were offered a wireless link service"

"All got too hard"

"Apparently there are insufficient ports left at the junction??? So called modern society...."

"Applied to move service to new (rural) address. Cso confirmed service was available, said 30 days max. 2 months later I called about the delay, received a letter saying could not supply as no infrastructure. I went to the Telstra pit at my gate and called them on mobile while standing on the pit. Much apologies, then the delaying tactics started. Took months and TIO / ACMA threats to get it done"

"Telstra would not connect me and gave a very unsatisfactory answer as to why not. I definitely got the feeling it would have been too much effort for them. My neighbour is with Telstra for their landline and can access package deals that I cannot"

"Asked to keep the copper phone line when changing over to nbn for internet as we have no mobile phone service. Was informed that this was not an option as copper was being switched off"

"Bought a new property and the telephone was cut off by previous owner. Can't get a bill, as they want to speak to previous owner before reissuing same number. Previous owners are uncontactable"



"But it took months to transfer a number from 1 property to another and I was told that I should, 'Be Grateful'. for the slow turnaround!!"

"But was told when we moved in that there was no service provided to this address despite me knowing the previous phone number and looking at the wall socket"

"Farm business has no fax line as too much "noise" to be able to send faxes. After multiple attempts to get Telstra to fix - just gave up and cancelled service"

"First phone call I was told that as we had access to NBN were not able to have a fixed landline installed (despite the lady being hardly able to understand me on the nbn line I was calling through). I contacted David Littleprouds office they assured me I had opportunity to get fixed landline. I called back and after being handed around to a few people started the process. I started this process a couple of times as never received follow up communications until I got in touch with Karl Dunne 5 months ago. I was advised the process would take 6 - 8 months!!!! In the meantime we are trying to run a business through substandard telecommunications and often the echo and delay is so bad we drive 20 minutes to park on a high hill to use our mobile phones to conduct business calls. A huge drain on our time and resources. We have not had communications from Telstra in regards to the landline for 5 months"

"Fixed landline is only financially worthwhile to us if bundled with internet. Apparently there were no ports at the local exchange... then we were suddenly "too far" despite the neighbours having service"

"Had a landline working until a summer storm heavy rain and a wash down the hill caused trouble with the lines. Called Telstra and they sent out tech multiple times. Tech knocked on door said cables are stuffed but Telstra won't replace because it will cost too much. Telstra told me I have to pay for a new line to the house"

"Had a RAM8 voice line for 18months, extremely unreliable. Tried to order remediation to support ADSL. The line was disconnected by Telstra and the number assigned to a third parties house, disconnecting them in the process. Upon restoration of the RAM8 voice only, the service was worse to the point of being unusable and permanently abandoned a few months later"

"Have been a Telstra customer for over fifty years but after recently having our landline disconnected for no apparent reason and trying unsuccessfully to have it reconnected over a period of months we decided to just rely on our mobile phones which can be a real problem in this area when the power goes out which it does regularly and the phone tower goes down leaving us with no communication"

"House had previously had a landline but was disconnected 10 years ago all wires still in perfect condition. We had small children and health issues, we were basically forced (by Telstra) to invest in a smart antenna just so we could make calls for emergencies, school and work. It took 8 months of weekly phone calls and endless emails to finally get the landline switched back on. Yes, all they had to do was twist 2 pieces of wire back together. Total cost to us: \$2000 and it becomes completely worthless as soon as the power cuts out"

"I did have to get one for a cottage for employees and it took 6 months to get done because they ended up doing it via the 3G wireless network. Was very frustrating and time and time wasting"

"I understand they are not available once NBN fixed wireless is activated"

"I was on Optus when we bought the house and they said they could not give me ADSL. I made enquiries with Telstra who said they would so I moved over. It turned out they couldn't because our copper line is on a "pair gains" basis and on "coils". We went all the way to the Ombudsman to no avail as they are of the view that Telstra has met its legal obligations in respect of our copper line. I was so crossed that I tried to go back to Optus and other providers who refused to take us because the technical issues made billing difficult"

"I was told I could get nbn an hone phone bundle an when tech came 5old me I didn't have enough service so I couldn't get nbn which meant no landline also so I had to cancel my previous order to start a new order to get landline then landline was faulty an are still trying to fix it 3 weeks later: (so I still have no landline"



"Is there enough room - I have wads of notes cms thick—when we purchased our property 4 years ago - took over 4 months to get the phone connected I was told to talk to the body corporate - go outside and see how the phone could be connected get on the roof etc etc there is no mobile service at my property what so ever to make a mobile call I need to drive 15 km for one dot of service if the weather is good. It took numerous calls frustration angst - eventually after threats to contact Telecommunications Ombudsman & threats to call politicians, numerous calls emails to Telstra Country managers (from ICPA contacts) last resort someone suggested going straight to 1800Radio,,, the phone was eventually connected. I now need to change my plan from a Business plan - which was the only way at the time I could get the phone connected to a home plan and they tell me it will take at least a fortnight and the phone will be disconnected - how do I know that it will ever be reconnected so I haven't done it even though it is costing me a lot of money"

"It took 2 years and still have not found the line to main house so have to travel to shed to use main phone 2km away"

"It took me six months to get a land line at this new address. There was a line already here, we were even ringing the prev. owners on it, but Telstra kept insisting that there wasn't one here. They weren't getting a signal from it or something. So I was told that because it was a 'new line' it would cost me \$400 to get the technician out to put one in. I then had to call on several occasions to see why no one had come when they were supposed to. One answer was that they couldn't find the gps coordinates for the property, so didn't know where to send the technician. Another was that because there are only so many lines at the exchange/junction in town, they were all in use, I would have to wait till someone left the town or died, thus freeing up a line! I only persevered, because our mobile service is unreliable and we live and work on a farm, one of the most dangerous places around, so need some sort of reliable communication in case of emergency. When a tech did come, he said he couldn't understand why he was sent out as he knew there was a line here already. He plugged a phone in, found it wasn't working, did at least two trips into town (Meandarra) before working on the line out on the road. He then came back in and checked the line again and it was working. So, other than plugging in his phone to test the line, no work was done on my property at all. All work done was either out the front on the road or in town. I still was charged \$400 for it. I rang and complained, so they reduced it by half! Woohoo! On ya Telstra. I was also told that I could just use a mobile. I explained that I don't get reliable service where we are, hence the reason why I wanted a landline. "But your only so many kms from the tower, you have service!" No amount of saying the same thing changed their mind. I see now that Telstra upgraded our tower last week and now my mobile service is worse! I thought upgrade meant better?"

"My fixed landline was cut off and put onto NBN when I got the NBN for internet. This was even after I asked for my fixed line to remain. I am an on call emergency Paramedic and require a reliable service so I can be called out. Once it was changed over Telstra and NBN said they couldn't put the fixed line back on"

"Originally asked Telstra about transferring old service to new address, and was told that this would be possible. 27th February Technician came to install wireless on house. Could not get signal or was very weak. 2nd Technician came to house 3 March. Same result. I had to ring and chase up "What happens now." Much tooing and froing of departments until I spoke to a nice girl called Emma who said NBN could not be provided. She contacted sales who told me I could not connect via copper (to get phone service or adsl internet) as it is phased out. Yet if you pick up a handset, you can hear a dial tone through the wires. Telstra then wanted to charge me \$379.00 disconnection fee and breaking contract. Much argument with billing regarding the fact that it is themselves who are breaking contract, not myself, and that I should not be charged for a service they cannot provide. Only way to get phone was through VOiP"

"Telstra advised not to get a fixed line because they couldn't guarantee service and said that service 'would be at best, intermittent'. They said we were at 'the end of the line' and they had no intention of repairing the lines. They have no understanding of NO mobile service and No idea of what you try to explain. 'The line is BROKEN- I am standing next to it' Reply- you need to test your handset- please take to your neighbour. The line is broken- I'm standing next to it Reply' you need to test your handset at your neighbour' The line is broken- my nearest neighbour is 40 klm away and they don't have a landline. I can send you photos of the broken line.



test your handset and I will call you back I am 20klns up the paddock with the only spot in 10 Kim's that has mobile service. Please try all your sockets ??????????"

"They say that we are going over to mobiles which don't work in this area. This is also a huge problem now that the meatworks are telling us we have to email them the forms that the truckies used to carry, MSA and LPA forms. We have to drive from 3 to 10 klms to get home to the home computer to be able to do this"

"Took 8 weeks to get a landline connected to my house. In the meantime we had no phone because we do not have mobile phone service either. If we had had a medical emergency it would have been fatal. We could not make a 000 call. Telstra did not care and would not send a technician out to check the line they said wouldn't work. I eventually threatened them with many things including my ombudsman and all of a sudden within 3 days I had a phone connected. How is that possible I waited 8 weeks for something that was done within 3 days once I told them I was going to the ombudsman? Then I was told that I could not go to the ombudsman because my case had been completed with my desired outcome - what about my 8 wasted weeks?"

"Tried to get Telstra to provide after 6 months and repeated calls to the ombudsman just gave up. There had been a line to this property and the previous owner had it disconnected. Everything was still in place Telstra just didn't want to reactivate it they wanted to sell me a more expensive satellite service"

"Tried to order one and was told that they were no longer offering landline services. We have since been through a long process to find out that we CAN actually apply for one"

"Yes, we tried to get a second line into our farm, as well as a fax line and were told that we were at the end of the phone line and the system was so old that it could not handle or allow us a third line"

"Yes, tried to transfer ph number from 1 location to the neighbouring property and it took some months and was told by 1 assistant that I should be grateful to receive their service as I lived so remotely!!"

"Yes, since we have had fixed wireless NBN available in our area we were even denied a new copper line service from Telstra. They reckoned they weren't allowed to take on new customers - although we have a copper service already. A co in Tassie says they can take us over. Some companies will only offer phone with internet and they usually offer too expensive NBN for us. We want to just run a copper line service and fixed wireless NBN, but it's really hard to find from one company. Almost impossible"

"Yes tried to get one into our schoolroom several years ago. Took 2 Technicians and a couple of weeks before they worked out they couldn't find the line and had to run it back from the main homestead which had a fax line and that is what we use to the schoolroom"

"Yes - this call relates to the Walhalla Goldfields Railway, a volunteer operated not for profit tourist train provider. Our major station and office has Skymuster + fixed phone in Walhalla. The other locations is Thomson where we have a station and our works depot - there can be up to 20 volunteer workers on site. It is an isolated clearing in the bush with no mobile coverage. Our fixed phone at Thomson has been down for 6 weeks - this means we have no emergency communication and cannot use our eftpos machine for visitors on the train, which has cost us many hundreds of dollars in lost income. The phone service has been on site for 28 years but our provider (Commander) says it cannot be fixed and we should use other options. So far, the Telco Ombudsman has been useless and we have just referred it to our local Federal MP. We feel like we are being treated very poorly"

"When we first moved here we did not have a landline and was told it would cost too much to put a line in. We believe we were given the wrong information. After trying to manage with a mobile that did not get reception we finally got a landline installed. We would be devastated if we lost our landline. We are in an area where wireless and mobile reception is very poor and totally unreliable. We are elderly and ill and we need a reliable landline as it is the only phone we can clearly communicate on"

"We eventually got a fixed land line after several years with a satellite phone, but only because I was classified as a medical emergency case. About 5 years later when an extension to the house was built and a second phone line was requested Telstra would never come out to install it"



When asked why they chose <u>not</u> to maintain their fixed line service, 15% of respondents nominated cost, nearly 9% nominated reliability, 4.3% selected voice quality and nearly 4% nominated that is was because a fault could not be fixed. Nearly 4% selected accessibility and 1.5% nominated that their provider advised them to change.

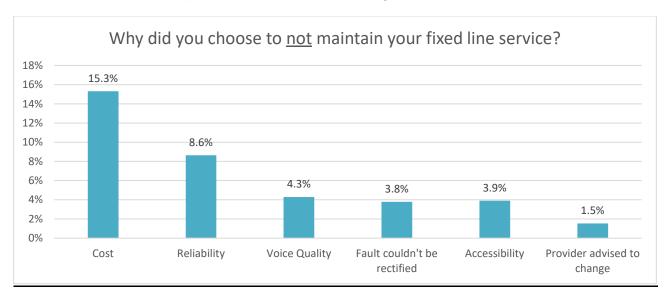


Figure 13: Why participant chose not to maintain their fixed line service

Anecdotal comments expand on the reasoning behind not maintaining a fixed line. For example, abandoning fixed line services due to cost were attributed to being too expensive to replace damaged infrastructure post weather events, the service was unreliable so the cost did not outweigh the gain of having a fixed line service and as the mobile network becomes more established, fixed lines were no longer required to receive faxes, see Table 13

Table 13: Anecdotal comments about the choice not to maintain the fixed line service due to cost

"Currently can't afford a landline due to damage done to the landline by electricians after a tornado hit my property. Am reliant on pathetic mobile coverage and rarely communicate via voice as it drops out on average every 30 seconds"

"Convenience More people contacting us directly by mobile numbers without trying the landline It was really an unnecessary cost No longer need landline to receive faxes everything is emailed"

"My daughter asked me to cancel her landline due to the fact they were not using for the \$60 per month cost. My concern being it is normally a security backup when the wi-fi is not working as is happening right now, but both are out, so no phone communication as all. A terribly worry when creeks are high and being so isolated, the telephone is vital, it could mean life or death"

"We built a new home and decided the cost of installing a fixed line cable to our home (1.1km) from the main line was prohibitive. We were fortunate to have a mobile signal at the site of the new home so were able to install a wireless and internet modem"

In terms of reliability, fixed lines were abandoned because they did not work reliably after weather events, the exchange was aged and not being upgraded and because of problems with hardware for example split lines and aged copper cable, see Table 14.



Table 14: Anecdotal comments about the choice not to maintain the fixed line service due to reliability

"It was unreliable kept getting water in line and unable to use due to crackling noises. Got sick of having to get Telstra to fix. The cabling is run above ground in places on its way to our place. Not sure if that contribute to problem but not paying for unreliable service"

"Internet was atrocious, constantly dropping out, take weeks to get fixed, and then only after a fight to get them to finally order a technician to come and look. All they want to do is constantly make me try different modems, ensure nothing else is plugged in etc. etc. It was always their crappy lines"

"Lack of reliable service in a business critical situation"

"Landline was hopeless. It would fail every time it rained. As we are in very sandy soils, the fault would clear once the soil dried out. Telstra simply can't get that in their heads and would not send a tech out for a few days in which time the soil dries out and they can't find the fault. I gave up and cancelled the service"

"Split line which means inability to use the telephone line for ADSL"

Participants noted voice quality as another concern, citing weather, faults and distance from the exchange as reasons for poor voice quality, see

Table 15: Anecdotal comments about the choice not to maintain the fixed line service due to voice quality

"It's very unreliable in our area and very susceptible to rain and other weather issues, and it's very difficult to get fixed, so gave up on landlines years ago..."

"Keeps breaking down so we are moving to mobile only. Sky Muster too unreliable according to neighbour who was without any service for 8 weeks after changing to Sky Muster"

"Long distance from exchange with poor copper cable"

"It was all bad, and we work from home. It was a disaster"

Nearly 4% of respondents cited accessibility as the reason for not maintaining a fixed line. Anecdotal comments supporting this claim include not needing a landline, too far away from the closest connection point and not being allowed to access the copper service, see

Table 16: Anecdotal comments about the choice not to maintain the fixed line service due to accessibility and misinformation

"I was a Grey Nomad therefore did not need a Landline"

"New line would be required to cross creek, up to 1 km from closest connection post"

"Told no ports available for NBN"

"We had no say in the matter as Telstra would not allow any other telco to hook us up to the fixed copper service"



Participants were advised by their provider to change, for example "I didn't want to lose it but the provider said they could not offer the service as it was being made redundant" and "[I] thought it [leaving] was compulsory" and that it was "[it was] too hard to get for too high a price".

Anecdotal comments related to the faults not being rectified include being damaged from lightening, not being able to locate the fault, fixed line not available in the area, and that they were not given any alternative.

Table 17: Anecdotal comments about the choice not to maintain the fixed line service due to faults not being rectified

"Approx. 100m of copper wire was fried by lightning along our driveway. We were offered NGWL as an alternative which I didn't really have a problem with but I did get a bit concerned when we had to agree to all these disclaimers before they went ahead with the service. It seems to be fine so far and when you live in the bush you get used to the fact that compromises need to be made"

"Had an extension from the main farm telephone but there is a fault somewhere in the wiring and not too sure of cost and ability of someone to locate fault and fix"

"No choice, fixed line service not available in my area"

"Telstra refuses to maintain copper system so forces people onto alternative mobile systems. They are happy to connect you but the system does not function"

When asked if respondents received **any form** of mobile coverage inside or outside their house of residence (including enough to receive a text message) nearly 20% responded 'no'. Thirty six percent could receive coverage inside their house and 17% could receive coverage directly outside of their house. Nineteen percent of participants had mobile coverage within 5klm of their house and only 7.4% could get coverage within 5kms from their home.

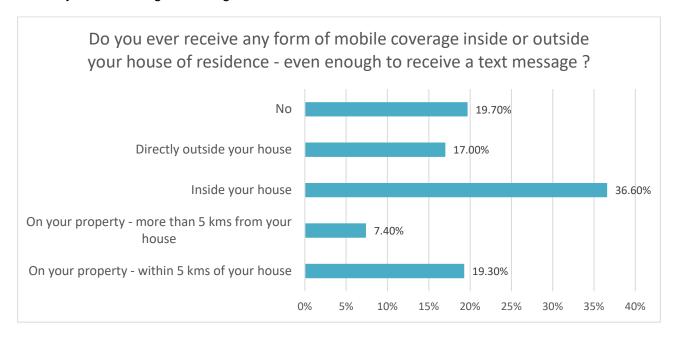


Figure 14: Do you ever receive any form of mobile coverage inside or outside your house of residence - even enough to receive a text message?



Approximately 80% of respondents received some form of mobile coverage nearby (or on their property) their house of residence. When these participants were asked if they could receive reliable coverage inside their house (enough to make and receive calls) without a booster or antenna. 35.5% answered yes and 64.6% responded 'no'.

Those who answered no (64.6%) were then asked if they received mobile coverage (enough to make and receive voice calls) with the assistance of a mobile booster or antenna.

With a mobile booster 57.9% of the respondents could not get enough mobile coverage to make and receive a voice call, 42.2% could make and receive calls with a booster.

Overall, the three questions revealed that 48.3% of survey participants do not receive enough coverage inside their house to make or receive a mobile phone call.

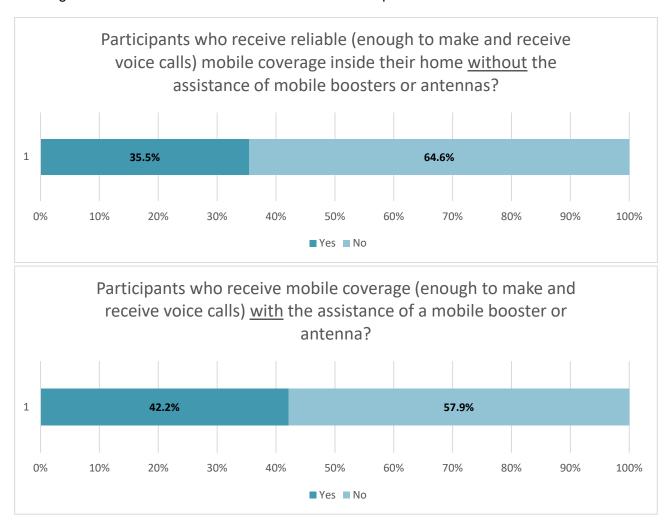


Figure 15: Do you receive reliable (enough to make and receive voice calls) mobile coverage inside your home without or without the assistance of mobile boosters or antennas?



Participants who do receive coverage were asked which tools they used to boost their mobile coverage. The majority (29%) used the Telstra Smart Antenna, 26% used the Nextivity Cel Fi and 19% used a roof top antenna.

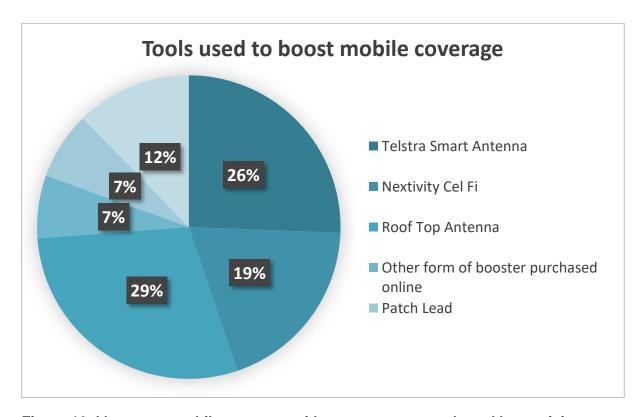


Figure 16: I boost my mobile coverage with _____ as selected by participants



Participants were asked how much they had spent on boosting their mobile signal. A cross tabulation shows that most participants who responded spent between \$1000 and \$2000 on a roof top antenna, followed by the Telstra Smart Antenna and then the Nextivity Cel Fi. Other products were purchased, which can be found in Table 18. Other included Wi-Fi assist, homemade positive loop antenna, go outside to answer the mobile phone, indoor aerial, a passive back to back antenna, patch lead, and a Yagi aerial and booster.

Table 18: Money spent by participants on boosting mobile signal

	Under \$500	\$500 - \$1000	\$1000 - \$2000	Over \$2000	Total
Telstra Smart Antenna	15	45	81	23	164
Nextivity Cel Fi	2	21	78	22	123
Roof Top Antenna	36	36	82	32	186
Other form of booster purchased online	23	11	7	2	43
Patch Lead	15	13	13	5	46
Other	49	7	17	6	79
	140	133	278	90	641

When asked who helped to set up the equipment, one third of participants answered that the local antenna specialist helped or did the work. Twenty seven percent said a family member or friend, 27.7% used their provider to set up the equipment and 7.7% used an online antenna/equipment specialist. Nearly 6% asked for help on the BIRRR website and less than 1% asked someone in local government to assist in setting up the equipment.

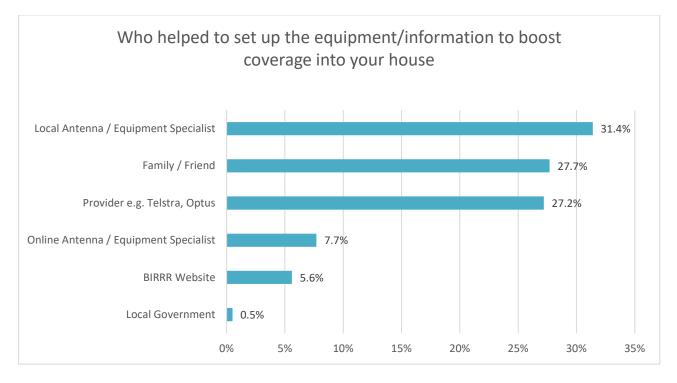


Figure 17: Setting up the equipment/information to boost coverage into participant's houses



Others who helped set up the equipment/information include the participant or their partner, the place of purchase, online information, an installer or technician, or it was set up as part of a community project.

Question 23 asked which mobile coverage the participant received. Nearly 46% receive 3g coverage, 31.5% receive 4G and 22.6% are unsure what sort of coverage they receive.

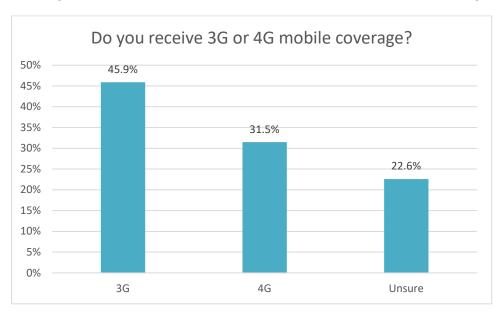


Figure 18: Do you receive 3G or 4G mobile coverage?

The majority of participants use Telstra (86.2%) as the provider for their mobile phone network, followed by Optus (10.2%) and then Vodaphone (1.2%). Just over 2% do not know who their network provider is.

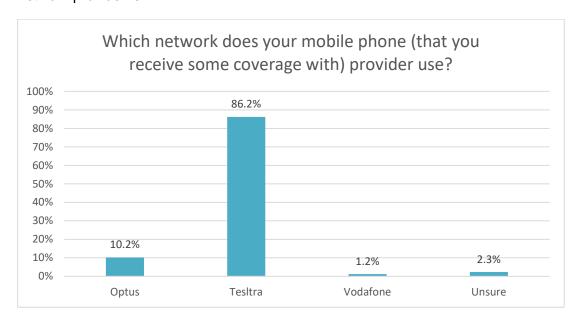


Figure 19: Which network does your mobile phone (that you receive some coverage with) provider use?



Nearly 40% of participants use nbn[™] Sky Muster Satellite as their home internet service, 31% use mobile broadband (3G/4G) and 16% use ADSL. Ten percent of participants are using nbn[™] fixed wireless or an alternative fixed wireless provider and 2% are using nbn[™] fixed line as their home internet service. Less than 1% are using and alternative fibre provider that is not nbn[™]. One participant is using very high bit-rate DSL (VDSL) and another is using Hybrid Fibre Co-Axial (HFC) as the internet service that they use at home. Respondents were able to select all services that they used. Further investigation of the data will be forthcoming to reveal the types of internet services used.

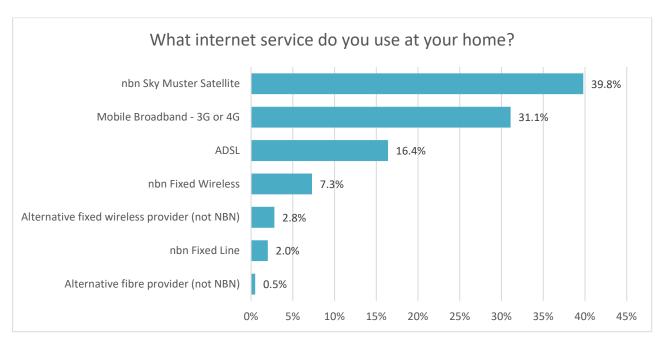


Figure 20: What internet are participants using

Less than 1% of participants have regularly used a payphone in the past 12 months. The majority of respondents have never used a payphone, and nearly 13% have rarely used one in the past 12 months.

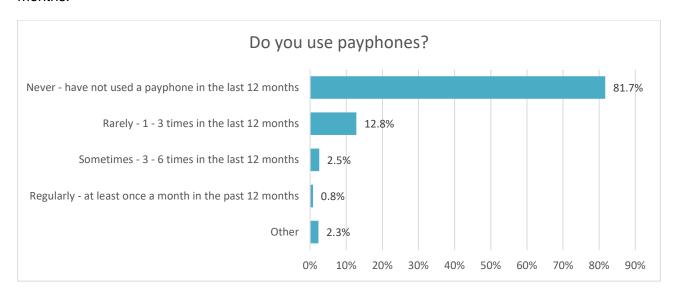


Figure 21: Do participants use pay phones



Of those that chose other, they stated that they were too far away to use, were often vandalised or broken when they went to use them or they don't exist in the participant's area.

Table 19: Anecdotal comments from participants about using pay phones

"Try to find one! There have been occasions over the last couple years without mobile coverage or flat battery - trying to make contact was NOT easy! There are many places around here where mobile coverage sucks - on account of hills, trees or no connectivity"

"We have a payphone in our staff kitchen. As we are the only homestead on a 300km stretch of road often travelled by tourists and others, we maintain a payphone for others to use when they have road problems or need to contact family/friends/assistance- it is also used by our staff as we do not have a landline service to the staff quarters and they do not have mobile coverage in some of the cottages and quarters (we have some coverage on a few buildings with smart antennae)"

"We have public phones here BUT if our phones are out, then these phones are out as well, so we have no reason to use them when our phones are working and if our phones aren't working, we can't use the public phones either"

"My nearest pay phone is 40km away. Not helpful in an emergency"

"We live in a rural area and no payphones nearby"

"No because none available within 15km, & those that are still around, are usually vandalised"

Just over half of the participants know of friends, neighbours or family who do not have internet connection and rely only on a fixed line phone service for communication.

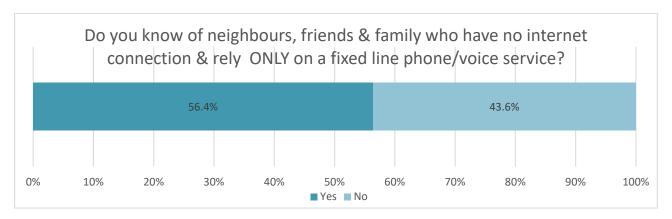


Figure 22: Neighbours, Friend and Family who do not have internet access and only rely on the fixed landline for their voice service

These include people who work on the property, parents who are close by, and some people who have no internet or mobile service in their area including elderly people from the participant's neighbourhood. Some respondents appeared misinformed with their internet options and thought that they lived in an area without access to an internet connection, see supporting comments in Table 20



Table 20: Anecdotal comments supporting claims about neighbours, friends and family who rely only on a fixed line service

"Yes my elderly parents have no Internet - my Father In law has a mobile phone but my Mother In Law is unable to use a mobile (due to age and frailty) and has only a landline to the house they rely on a Battery powered Landline and when it is down she has no way of contacting her Husband if she is ill and needing him when he is out on the property"

"We know of many people who do not have access to internet or mobile services. There will be many lives at stake with the removal of land-lines. Of course the cost of these services is prohibitive to anyone who is not extremely wealthy. In the event of a fire fatalities will be inevitable"

"We have neighbours who only have a landline phone, when it goes out the only form of communication available to them is the two way radio"

"We have combined two properties to form one whole property. We have three other houses on our property that are occupied by people who work for us or rent from us. Two of those properties that lie on Idaville Rd do not have either mobile reception or wireless internet. IT IS A REAL PROBLEM IN EMERGENCIES. We have had several local fires and with mobile as the principal form of communication we can't contact the people in those houses 2 of which are located more than 2kms from our house"

"There are three properties to our north that have weekenders on them. They all have only a fixed line phone to use to make calls or they have to drive 30 kilometres to get a reliable mobile phone signal"

"Some of the older generation 65 years plus, living in rural & remote areas do not own a computer nor know how to operate one. They have a fear & sometimes a dislike for the new technology. They are unable to operate a computer or receive or send an email. They are totally reliant on fixed landline telephone and fax services to communicate with the outside world"

"Several people cannot get any mobile signal anywhere on their property even with antennas and boosters. There is one Telstra antenna in Adaminaby there are no other towers within 60 km"

"Parts of Gidgegannup have no mobile reception and poor landlines. For many of us, our previous legacy satellite internet services were terminated "because NBN was coming". Multiple delays in NBN means fixed wireless not available here probably until late 2019. Have approached multiple politicians about the vulnerable situation this leaves us in with virtually no communication in high risk area (my farm was wiped out 3 years ago by fire and I had no way of knowing it was coming my way). Their response is that we could perhaps be connected to Skymuster (if we beg) but that will mean that when NBN fixed wireless is eventually available here we won't be allowed to switch over to it!!!!! They can rub that in their hair --I'll wait for 5G, and NBN can rot"

"Our 85yo mother living two properties away uses only the landline and is very worried about what will happen when she is forced to change her home phone to the NBN as she doesn't understand it and neither do we, as to why there will be no choice. Also her property will rely on NBN through the mobile telephone tower (so we've been told but NBN) and mobile ph. reception at her house is not 100% good"

"My elderly mother lives with us here. She doesn't use the internet and her mobile doesn't work at all here at our home. She is very dependent on our home phone line working as it is her only line of communication to her other family and friends. She cannot use my mobile as it's too complicated for her and can only be used on our front veranda to be able to get enough signal on speakerphone only to make a call. We live 40 kilometres from Rockhampton and our phone has been out of order twice this year already (as of this morning again). We are supposed to have priority assistance for her medical condition to have the phone fixed within 24 hours. I faxed the relevant forms off in February last year, but at the end of January this year when I reported the phone out of order they had no evidence that the fax was received. Very stressful for all concerned when the phone is out of order"



Leximancer 4.5 (see http://info.leximancer.com/) was used to explore the concepts within the unstructured comment text of Question 29, which asked if there was anything else the participants would like say about their primary voice service. Three main themes emerged and are identified in Figure 23, which also shows the concepts under each theme. These concepts are outlined below. An in-depth content analysis will be completed when time permits and a supplementary report will be available from www.birrraus.com/



Figure 23: Themes from anecdotal comments from survey participants about their primary voice service

The following statements draw from participant comments surrounding the concept of service, landline and copper.

Theme: Service

Four hundred and eighty nine comments were given by participants that were related to service. Many of the comments supported themes presented previously, however, the overarching theme was that "rural matters too". All of the respondents in RRR areas rely heavily on their fixed line service. Many have tried mobile options and antennas and claim that they do not currently compare with the copper landline. Participants rely on the landline service for schooling, emergency services, business, health and social connectivity. Many do not have reliable mobile coverage and reception. Participants need their primary voice service, particularly when mobile coverage is sporadic on the farm leaving them no other way to contact emergency services in the event of a life threatening situation. RRR people are willing to try alternative options, but only if they meet the current level of landline service. The landline service is more robust during natural disasters and blackouts and in mountainous and remote areas. While alternative services remain unreliable, participant's comments indicate that they do not want to have them as their primary voice service. Participant comments highlight that they do not receive the same benefits as people in non RRR areas, with some paying up to three different bills to keep their current communication tools.

Theme: landline



Three hundred and fifty two participants left comments related to landline. Participants "landlines are more reliable than their internet service, it isn't dependent on data usage, speed during peak times, it doesn't run out of power and is the cheapest form of communication for many families and businesses". The landline is particularly important during bushfire/ storm season when power outages may be experienced. Participant landlines are often their only reliable service, which is also essential for not only personal/business use but also for education purposes. Those participants that rely on alternative electricity sources cannot rely on VoIP as they only have the internet turned on for short periods of time. In the event of a cyclone or power surges the unpowered landline is the participant's most reliable form of communication. Participant plea is to leave the current landline as it stand, because without a guaranteed power supply to the internet or a good stable mobile or satellite network they would be isolated.

Theme: copper

Two hundred and thirty eight participant comments relate to copper. Respondents report their businesses require EFTPOS services, which use a copper landline and that it is essential for work and emergencies. Participants are becoming frustrated with their copper landline not being fixed and it is becoming more unreliable. Internet doesn't work in inclement weather, and some participants power is less reliable so the really depend on the copper landline. Participants claim that their voice communications should not be dependent on the internet to work. Internet services need to be improved because they are not really useful at the moment. The introduction of the NBN is providing Australians with a system unsuitable for all Australia. While the copper network is often old and regularly faulty, mobiles don't work properly so it is the only option that people in RRR Australia have.



Conclusion

The survey found that rural, regional and remote 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 in their residence.

The survey results highlighted that respondents often have issues with fault rectification and getting problems resolved in regard to their voice services. Over 40% of respondents reported that their main voice service stops working more than three times per year. Highlighted in the survey are thousands of comments stating why placing all communication services in one basket such as nbnTM Sky Muster could lead to disastrous consequences for regional Australians.

The Government must not consider rural, regional and remote (RRR) mobile connectivity as a replacement for a Universal Service Obligation (USO) landline, until this connectivity at least meets the same service guarantees as existing arrangements. The new Universal Service Guarantee (USG) should continue to ensure that ALL Australian consumers and businesses have baseline voice services that are at least equivalent to the standard offered under the existing USO.

Standard telephone services must be maintained until such a time that baseline service needs are exceeded using alternate Broadband technology. All existing landline options must be covered under the USG (even those that are currently not included). There should be no degradation in the current voice service that users receive. The USO should be technology neutral and updatable to ensure ongoing needs are met. Every Australian, irrespective of where they live or work, should be confident they can access quality, reliable, accessible & affordable voice and broadband services with customer support guarantees. Serious commitment is needed to ensure that RRR areas are not disadvantaged due to their population and postcode.