

Telecommunications
Industry
Ombudsman

TIO submission to the
Department of Infrastructure,
Transport, Regional Development
and Communications
Consultation on Alternative Voice
Services Trials
February 2020

Introduction from Ombudsman, Judi Jones

I welcome the opportunity to comment on this consultation and support the initiative to provide new voice service options for consumers living in rural and remote Australia.

My office receives complaints from a diverse range of consumers from all regions across Australia. The complaints we receive from rural and remote consumers provide us with a unique insight into the way these consumers use and rely on communications services.

Consumers in rural and remote locations may use a voice service rather than attend education and health services in person or may receive critical advice from the Royal Flying Doctors Service about how to handle a medical emergency.

Rural and remote consumers face particular challenges when their voice service is poor quality, unreliable or interrupted by a fault. Some consumers living in isolated regions might only have one technology type available. For these consumers, if their service is affected by a fault, they might not have access to a service until the fault is fixed.

The different ways rural and remote consumers use services increases the importance of designing robust services that consistently deliver a quality voice service and include contingency measures for prompt response if a fault occurs.

Our submission considers the unique needs of rural and remote consumers and outlines our recommendations for the trial based on these needs. It includes complaint data and case studies informed by complaints received by my office during Financial Year 2019 and Quarter 1 Financial Year 2020. These insights relate broadly to three of the eight questions posed by the Department in the consultation paper:

- Should the department be seeking to achieve other objectives through the trials? If so, how would this affect the design?
- In terms of the deliverables for customers, do you have any concerns about the proposed design of the trials or suggestions to improve it, for example, locations for the trials, how best to recruit consumers to take part, requirements on CSPs, and service requirements?
- Do you have any comments regarding the criteria for assessing proposals and contracting CSPs?

1. A snapshot of landline complaints by location

We receive complaints about landline services from consumers living in all regions across Australia, from major metropolitan centres to remote stations and communities with no infrastructure.

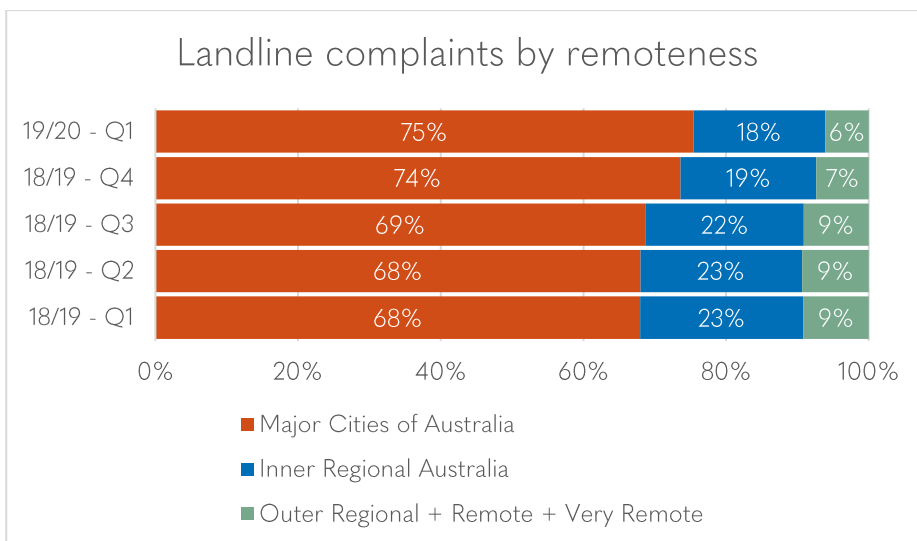
During Financial Year 2019, we received 132,387 complaints from consumers.¹ Of these, 17,267 complaints were about a landline² service. In Quarter 1 Financial Year 2020, we received 32,801 complaints³ and 4,398 of these were about a landline service.

The charts below classify landline complaints by location for Financial Year 2019 and Quarter 1 Financial Year 2020. We determined consumer location using the Statistical Geography Standard Remoteness Structure⁴ prepared by the Australian Bureau of Statistics.

1.1 All complaints about landline services

The proportion of complaints we received from outer regional, remote and very remote consumers remained steady for the first three quarters of Financial Year 2019, consistently making up 9% of complaints about landline services.

Since Quarter 4 Financial Year 2019, complaints from outer regional, remote and very remote consumers have reduced proportional to other regions, reaching a low of 6% for Quarter 1 Financial Year 2020.



¹ For more details, please see the Telecommunications Industry Ombudsman's [Annual Report FY19](#).

² The complaint is about a landline service only – no other service type, such as internet, forms part of the complaint

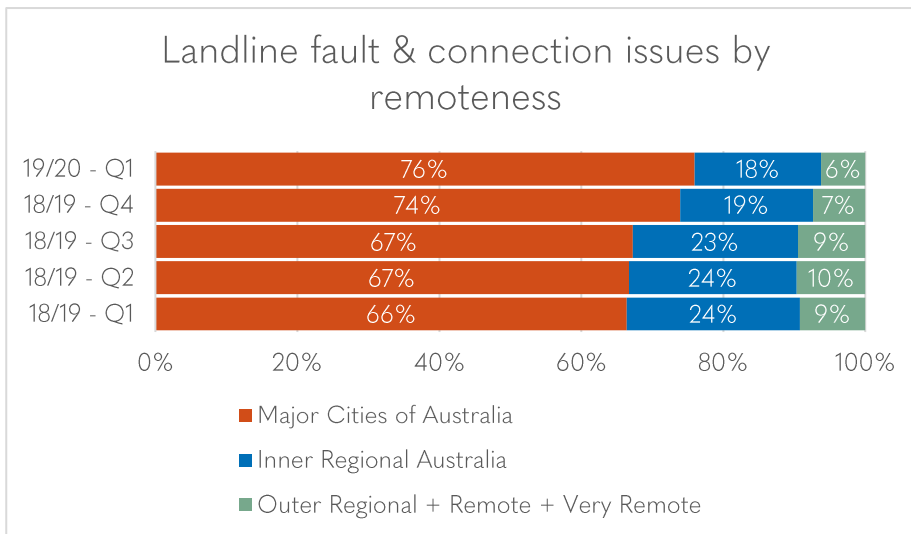
³ For more details, see Page 7 of the Telecommunications Industry Ombudsman's [Quarterly report for Quarter 1 FY20](#).

⁴ This method classifies Hobart and Darwin as outer regional as they have no significant population nearby. Conversely, towns several hours from major metropolitan areas may be classified as inner regional. A map prepared by the Australian Bureau of Statistics (ABS) is in Appendix A and at [Remoteness Structure](#).

1.2 Fault and connection complaints about landline services

The proportion of complaints about fault and connections⁵ for landline services from outer regional, remote and very remote consumers was similar to overall landline complaints, reflecting 9% and 10% of complaints for the first three quarters of Financial Year 2019.

Since Quarter 4 Financial Year 2019 complaints about faults and connection issues for landline services from regional and remote consumers reduced in proportion to complaints from consumers in major cities.



2. Responding to the unique needs of rural and remote consumers

The unique needs of rural and remote consumers mean they need a reliable voice service, use communication services differently to, and have fewer communication options than consumers living in more populated areas.

Responding to these unique needs, this section highlights insights that may assist the Department when it is considering:

- objectives for the trials
- considerations for the proposed design, and
- when assessing proposals for the trials.

2.1 Rural and remote consumers need a reliable voice service

Rural and remote consumers often describe situations to us that demonstrate a higher reliance on fewer communication services to do more things.

This may include accessing education as well as health and emergency services.

⁵ Fault and connection issues are a subset of total complaints we report on.

Rural and remote consumers tell us they need access to a reliable voice service, one that is not affected by varying weather conditions and will continue to operate when the power supply is interrupted.

2.2 Rural and remote consumers use voice services differently

Rural and remote consumers use voice services differently, whether it is accessing basic services, operating a business or contacting emergency services.

A communication service that is poor quality, unreliable or faulty can cause significant disruption to a rural or remote consumer, particularly where it prevents them from accessing vital services.

a) Accessing basic services

For consumers living in remote areas, a voice service may be the only way to access services that consumers in more populated areas would ordinarily attend in person. This includes attending medical consultations or accessing education by telephone or internet.

We hear from consumers who describe the significant impact delayed or inadequate fault repairs have on their day to day lives. Consumers who rely on a voice service alone have told us they feel vulnerable when they cannot access their service.⁶

b) Operating a business

Consumers living in rural and remote areas who operate a business from their home, such as a farming business, often tell us their business relies heavily on their communication services. Some situations consumers describe to us are consistent with the findings of the 2018 Regional Telecommunications Review.⁷ These include:

- A business with access to only one service technology type can be more impacted if the service is poor quality or unreliable, or if the service is not working due to a fault or power outage
- There are extra costs of buying and installing additional equipment to receive or improve service quality, and
- Depending on the technology types available to rural and remote business consumers, they may have to pay more to receive a comparable or lesser service than their metropolitan counterparts.

c) Contacting emergency services

When rural and remote consumers have a faulty voice service, we see a recurring theme of helplessness and feeling at risk knowing they have no way to contact emergency services if an emergency occurs.

‘We are at high risk of bushfires and also [live in] a flood prone area. We cannot be without communication – it threatens lives.’

*Kai – see case study B, Page 7

⁶ See [Telecommunications Industry Ombudsman Submission](#) to the ACMA’s post-implementation review of the NBN consumer experience rules in September 2019

⁷ See pages 19-20 of the [2018 Regional Telecommunications Review](#)

2.3 Rural and remote consumers can have fewer communication options

Rural and remote consumers may face further challenges when they have fewer communication service and plan options than consumers who live in more populated areas.

a) Responding to a fault on a consumer's only service

When faults occur, it is vital providers have robust contingency plans in place to provide suitable temporary options, such as an interim service, until the service is restored.

In some rural and remote areas, consumers may only have access to a voice service through one technology type. If a consumer has a faulty voice service and no alternate service options, the provider should commit to restoring the consumer's service access as a priority.

b) Affordability of communication options

Some current service plans available to rural and remote consumers may cost more and offer fewer inclusions (such as data) than plans available to consumers living in more populated areas.⁸

It is important that consumers living in rural and remote areas are able to access an affordable, quality voice service.

Case study A – Remote cattle station relies on faulty landline for more than a year

Mellissa and her partner have a new baby and live at a remote cattle station around 400km from the nearest town. They have no mobile coverage and rely on a landline service for communication. In an emergency, the landline is their only way to contact the Royal Flying Doctors Service for assistance.

In early 2018, Mellissa reported a fault to her provider. She said there were frequent clicking and high-pitched squealing sounds on the line and voices would cut in and out during a call.

More than a year later, Mellissa contacted the Telecommunications Industry Ombudsman to complain, saying she had reported the fault to her provider many times, but it had not fixed the problem, even after visiting the property.

*Name of individuals, organisations and companies have been changed

⁸ See Page 25 of the [2018 Regional Telecommunications Review](#)

Case study B – Recurring faults place family with medical issues at risk

Kai has a mobile service, landline and ADSL. He lives with his family near a small town in rural NSW in an area at risk of both bushfire and flooding. The mobile service only works when he is in town. A member of Kai's family has been hospitalised several times over the past year following severe allergic reactions.

When Kai contacted the Telecommunications Industry Ombudsman, he said all landline, ADSL and mobile services in the community had been interrupted by faults several times over the past month, and it had taken around two days to restore services each time. Kai said when the local mobile tower goes down, they have to drive for an hour to reach the nearest mobile reception.

Kai said he has reported service issues to his provider previously, and while faults are repaired each time, they frequently recur within a short time. Kai said he wanted his provider to implement a permanent fix so he can be confident his services will work if an emergency occurs.

*Name of individuals, organisations and companies have been changed

Case study C – Farmer's services affected by delays in repairing landline fault

Graham runs a dairy farm in rural Victoria and has a landline, ADSL and mobile service. Graham says his landline has had poor service quality since 2015.

In 2018, after a utility company carried out work near the property, the landline stopped working and internet speeds reduced to around 2Mbps. Graham could not download updates on his mobile service or iPad. Graham reported a fault to his provider in mid-2018, and it arranged several technicians but extended the date several times. Around six months later, a technician attended and completed a temporary repair which included running cable along a fence.

Graham contacted the Telecommunications Industry Ombudsman to complain, saying he could now use the voice service, but the internet service had not improved, and he was not satisfied with the quality of repair or the time it was taking to restore the service.

*Name of individuals, organisations and companies have been changed

3. Suggestions for an effective trial

We receive a broad range of complaints about poor quality, unreliable or faulty voice services from rural and remote consumers. Drawing on these, we recommend a broad trial that involves multiple service providers and technologies and covers a broad range of geographies including challenging and unique areas.

3.1 Considerations for trial parameters

To ensure the alternative voice services trial is effective and measures relevant outcomes, we recommend the department consider the following:

a) **Test across all conditions**

We recommend the Department test the reliability of voice services over time in all weather conditions and local temperature ranges, including areas prone to extreme weather events.

We support the Department's decision to run the trial over a full year to examine service quality across all seasons and in different weather conditions. We see complaints where consumers experience service interruption during certain weather types such as following heavy rain, or reduced quality of service during heavily overcast or smoky conditions.

b) **Understand unique topography**

We recommend the Department identify and consider the impact of service delivery across different topographies, such as waterways, rocky outcrops, and areas with high iron content, some of which may not be evident via maps.

We see complaints where, despite nearby infrastructure, a consumer cannot access a service or receives a reduced quality of service, and following investigation, a provider says the service is impacted by a geographical feature.

c) **Use NBN Traffic Class 1**

We recommend any trial services delivered over the NBN use Traffic Class 1. With Traffic Class 4, the service is likely to experience interference and have substandard voice quality. Call quality must sufficiently accommodate differences in voices, including changes during periods of stress such as when making a critical emergency call.

We see complaints where consumers report experiencing poor quality calls, including instances where parties are not able to hear each other.

d) **Stress test services**

We recommend the Department stress test trialled services with concurrent users to see how the network responds to an increased number of users, as would be expected in an emergency situation such as a bushfire, flood or dust storm. We also recommend testing with the 000 emergency service.

At times, we see complaints where consumers report either intermittent or poor quality of service and are told congestion is the cause.

e) **Measuring service quality**

We consider an effective trial could measure end to end network performance against industry voice service standards⁹ in relation to the overall quality of the consumer experience. This would include measuring:

- The number of dropouts and level of service reliability
- The time it takes to connect a call, and
- The quality and clarity of calls.

3.2 Identifying suitable trial participants

Consumers contact us about a diverse range of service issues that arise for a diverse range of reasons. With unique insight into the way rural and remote consumers use and rely on communication services, we suggest the Department consider:

- Having a minimum number of trial participants for each technology type participating in the trial
- To ensure the trial draws out potential issues, including consumers whose call patterns over the past year demonstrate ongoing frequent service use for incoming and outgoing calls
- Including consumers from a broad range of geographical landscapes for each technology type.

4. Creating a strong foundation for the future

We see value in ensuring services that are rolled out following the trial are part of a long-term strategy, which could involve inter-departmental co-ordination such as between the Australian Communications and Media Authority and the Department. This is because delivering voice services across vast sparsely populated regions presents a range of significant challenges.

These include:

- the logistics of working across various geographies
- the need for resilient infrastructure that can withstand the Australian climate, and
- planning and executing network maintenance and responsive repair contingencies for areas where consumers have a higher reliance on their service.

4.1 Clarity around existing trial parameters

The high capacity radio concentrator (HCRC) network that is approaching obsolescence currently provides consumers with voice and internet services.¹⁰

Given the scope of the trial relates to voice services, it is unclear whether services participating in the trial will have the capacity to extend to deliver an internet service. If the voice service could also provide a platform upon which additional services may be delivered, it is important that the service has the necessary capacity and is sufficiently robust and reliable to accommodate the additional service types.

⁹ The C519:2004 End-to-End Network Performance for the STS Code was reconfirmed in 2009 and 2014 with the next review scheduled to occur in 2019: <https://www.commsalliance.com.au/Documents/Publications-by-Topic/Technical-Network>

¹⁰ <http://web.auzzie.net/radiophone.html>

If faults affecting a voice service in future could extend to interrupting an internet service, the design should consider that the fault may impact a rural or remote consumer's access to essential services such as:

- health (eHealth, RFDS consultations, emergency services, mental health services)
- education, and
- grocery shopping using a Basics¹¹ card.

4.2 Post-trial services

A provider who takes part in the initiative may decide not to continue offering services at the conclusion of the trial.

While there could be practical reasons for this, such as the trial revealing issues that can only be remedied at high cost to provider or consumer, it is unclear what the next steps will be if no provider taking part in the trial continues offering services following the trial.

¹¹ <https://www.humanservices.gov.au/individuals/services/centrelink/basicscard>

5. Appendix A – Map of the 2016 remoteness areas for Australia

MAP OF THE 2016 REMOTENESS AREAS FOR AUSTRALIA

