



Submission

to the

Australian Government's Review into the Better Delivery of Universal Services

from the

Federal Council
of the
Isolated Children's Parents' Association of Australia Inc.
ICPA (Aust)

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The Isolated Children's Parents' Association of Australia, ICPA (Aust), welcomes the opportunity to contribute to the consultation process to consider options for better delivery of telecommunications universal voice services, providing feedback related specifically to communications needs of rural and remote education and geographically isolated students.

ICPA (Aust) views the telecommunications Universal Service Obligations (USO) as **absolutely essential**, given the reliance on fixed phones across so much of Australia, particularly in remote areas. Previous suggestions that the USO is no longer necessary because of mobile phone availability, advanced technology and the nbn, ignore the reality of the technological gap experienced by residents in geographically isolated areas. There should be no decline in the current voice services that our members receive.

ICPA (Aust) is a voluntary, apolitical, national parent organisation, which advocates on behalf of our members for equity of access to an appropriate education for all geographically isolated children and students, from early childhood through to tertiary. The majority of member families of the Association reside in geographically isolated areas of Australia and all share a common goal of achieving equitable access to education for their children and the provision of services required to achieve this. Students whose family home is in rural and remote Australia and who are enrolled in Schools of Distance Education, rely heavily on telecommunications to access daily lessons, via both telephone and internet. Most would be in the 0.7% of the population that have no access to any mobile network and the majority would also be in the 3% of the population that will rely on satellite to access the internet.

Our member families also access small rural schools that are dependent on fixed landlines for contact for teacher support/assistance/mentoring, emergencies and general administration tasks of a school. There are still small rural schools which are not in mobile coverage areas and working landline phones are essential for the operation of these schools.

Telecommunications are essential to any modern economy, however for far too long people that live, work and are educated in geographically isolated locations have had to put up with a less than equitable situation with regard to their telecommunication access and this has been a core part of ICPA (Aust) advocacy for many years.

In recent years there has been a rise in the number of mobile voice services and a fall in the number of fixed voice services in Australia; the situation is quite different in the rural, remote and very remote areas where most of our members reside. Many of our members still rely on landlines (Copper, High Capacity Radio Concentrator (HCRC) Systems, Next G Wireless Link (NGWL) or Satellite phones) due to the unavailability of mobile coverage or another reliable service. These services are essential, and for many individuals residing in regional, rural and remote areas they are the only reliable and trusted lifeline during natural disasters and emergencies. The removal of landline telephones as a standard telephone service from premises in rural and remote Australia would be detrimental to all who reside in these locations, significantly limiting the ability to educate children and run businesses successfully. The landline provides the mantle of safety when all else fails.



Landline telephone services play a significant role in providing voice services to accompany 'on air' lessons with teachers and classmates, as well as additional lessons and seeking assistance from teachers at the distance education school centres. As a large portion of geographically isolated distance education students live outside of mobile coverage areas, maintaining landlines and ensuring that these services continue is paramount for these students. When internet services fail, the availability of landline phones ensures that students still have connectivity and are able to continue participating in their lessons, even if the video/online portion is out. Until such time as an equivalent or better alternative, appropriate and reliable voice technology is available, landline telephony services must exist to allow rural and remote students to access education.

We are pleased to provide the following comments to the consultation process to consider options for better delivery of telecommunications universal voice services.

1. What do you consider are the key outcomes that a modern universal service framework should deliver?

Careful consideration will need to be put forward for any future USO strategies to ensure that the unique communication needs of regional, rural and remote (RRR) families are considered and met, exceeding existing reliability standards.

Flexibility

A modern USO should have the flexibility to act as a framework that includes benchmarks to set minimum adequate. It should have sufficient flexibility to adjust in response to advancements in technology to ensure that improvements in service standards, performance and capabilities of services delivered under the USO can occur as technology permits.

Technology develops quickly, and a blend is needed in RRR areas; there are different needs for different situations. While the developments in communications are exciting, one particular type (LEOs or satellites in general for example) cannot be the only solution or source for all needs.

Reliability

Rural Australia deals with the impact of fire, drought, floods and the tyranny of distance and residents rely heavily on landlines and digital services. The robustness and ability of the existing landline to work independently of third party services, e.g. power, is the minimum standard that needs to be considered in any USO reform. A working landline is a critical safety net.

Any new voice technologies must:

- be fit for purpose in their specific location, evidenced by data collected on location in regards to robustness, reliability, longevity etc from trials
- not be dependent on third party services for reliability, for example, battery back-up and power supply needs to be provided with the voice service.

Trials

Timeframes for trials need to be extensive and ongoing to assure accurate results. For example, in a twelve-month period in a drought situation there may not be any weather events that will affect



the technology. Trials should be undertaken in a range of circumstances and a wide range of rural, remote and very remote sites, who will be reliant on the services, to assess the impact factors such as climate, terrain, topography, vegetation, dust and/or smoke, power supply type (especially where the technology is reliant on electricity supply), weather and accessibility to the site. These factors impact services and their effect on the alternative technology being trialled.

Effective trials should include factors such as:

- reliability, ease of installation, customer service.
- repair times - sites where the alternative technology is being installed or may be installed in the future are remote locations where currently it is difficult to have services repaired and elongated repair times are common. The need for access to adequate repair mechanisms needs to be considered for any new or alternative technology.
- support for customers 'learning' new technologies, ease of use of alternative technology.
- affordability.
- how the alternative service complements or supports current services available in the area should also be monitored. People living in geographic isolation require **a minimum of two communication services** in order to ensure that they have a functioning form of communication at all times - current technologies can see communications down from power outages, weather events (rain fade for nbn Sky Muster satellite) and faults. Alternative services should also look at being independent of already existing services so that those living remotely will have surety with a balance of communications methods available to them.
- consideration of the stability of the service and if there are noticeable variations in quality of the service – are there specific times when the service is not as effective as others? Does the weather (rain, wind) affect the service?
- aim to gather data across various key metrics relevant for performance of voice services i.e., availability/uptime, upload and download speeds, latency, packet loss, jitter, echo, noise etc.

It is important to test new technology with a cross-section of rural, remote and very remote customers and more specifically in locations where the technology may be relied upon, as communications needs, environmental factors and the other aspects of rural and remote Australia which may impact reliability and quality of telecommunications services varies greatly.

The telecommunications network operators should be required to maintain network resiliency or provide redundancy options on their networks.

ICPA (Aust) are disappointed that the previous Alternative Voice Services Trials (AVST) which promised to investigate and identify alternative technologies has resulted in primarily satellite based alternatives, essentially Voice over Internet Protocol (VoIP), which is for the most part already available. Satellite internet based solutions for voice services in rural, remote and very remote areas are not a satisfactory alternative as these families require a voice service which is independent from their data service, reliable in weather events, power outages and do not suffer from latency. Geographically isolated families require access to *at least two alternative sources of communications* to ensure they have a working method of communications available to them the majority of the time.



This would not be the case for many residents currently solely reliant on satellite for internet should their existing not satellite based voice service be transferred to a similar technology. ICPA (Aust)

appreciate that the trials were only able to fund those technologies offered by interested parties and welcome assurance that nothing will change with regards to current phone service types unless the solutions are equal to or better than existing services and we implore this to be guaranteed. We also urge the government and service providers to investigate further alternatives to these old technologies to ensure rural and remote families have access to a high quality, reliable voice service. The provision of a modernised HCRC system may be the most efficient and reliable form of voice communication in some rural and remote areas of Australia.

Weather

Weather can affect the reliability of technology in rural and remote areas. Heavy cloud or rain can break the satellite signal with nbn Sky Muster™ and the weather event does not actually have to be at the location of the nbn Sky Muster™ service. Adverse weather at the base station or along the spot beam can also cause disruptive outages.

Weather events can also knock out phone services in areas that may take a long time to be accessed in order for these services to be repaired. If a service is not working to its full ability, it limits how much users can embrace technology. Fixed Wireless nbn customers have reported their VoIP services not working adequately. These customers now have no landline as many gave their landlines up when they moved to nbn Fixed Wireless, not realising they could keep their landline. VoIP phones are very problematic for some Fixed Wireless customers. VoIP going out in storms and for a long time afterwards has also been mentioned as being a problem.

The 'Wet Season' is particularly problematic for many Sky Muster users as there can be continuous cloud cover or rain interference. When the only source of voice communication is connected to a satellite internet service, numerous phone service outages can also be experienced by customers.

2. What safety-net services does a modern universal service framework need to address?

As the digital revolution continues to accelerate and place demands on people leaving them no option but to use technology to access necessary services, it is vital that safeguards are in place to ensure rural and remote based users are not left behind and further marginalised.

The USO does not necessarily have to contain a one size fits all approach. Traditionally, a copper landline (or HCRC) has been the standard everywhere. The USO may need to differentiate between regional, rural and remote situations and recognise that there may be a requirement for different technologies in different environments.

Two Different Forms of Communication

The delivery of voice and voice over internet services need to be in two different forms, independent of each other, especially for those without a mobile service.

The suggestion of a USO providing a baseline broadband (including voice) service that would see all services delivered via one connection, presents a problem in rural and remote areas. There would be no means of communication should the connection be lost. Families can be hundreds of



kilometres from a town or even the next neighbouring homestead. If the internet is the only source for both voice and data, (where there is no mobile service coverage) then there can be no

communication when the internet is down. Safety is a huge concern to those that live, work and travel in rural and remote areas due to the distance between them and assistance, when it is required. This assistance can be lifesaving.

Essential services such as education, health, business, banking etc. are also not available in any form if voice and data are provided through the same source and it fails. The recent nbn and Optus outages highlight how one service or the other can be out and members have relied on an alternative of either landline or the internet for communication until the other service was repaired. Repair times outside of major centres can be quite lengthy due to distance, but at present people in rural and remote areas can turn to an alternative source to get messages out or to report the fault. If communications services become completely reliant on satellite internet for both voice and data, reporting outages when the service is not working would be impossible short of driving to the next available working service. During times, such as the Wet Season in Northern Australia, roads can be cut off for weeks and sometimes months, making travel impossible. The Wet Season is also one of the most prevalent times for satellite internet to go out due to weather conditions and cloud cover. It cannot be stressed enough how essential it is for those living in rural and remote Australia to have at least two reliable and independent sources of communication available to them.

When telephony fails, there is an added burden with children away at boarding school. Having children far away at a young age (in order to access education due to geographical isolation) is very difficult for families. The children need to be able to talk to their family for support and contact with home is essential when they have problems they are dealing with or are missing home whilst away at school. It is difficult for families in general to provide support and assistance to their children from such a distance but this is compounded when they are unable to speak to them due to the phone services not working. When a phone service is out, parents cannot be reached by the boarding school if emergencies occur and treatment or permission for treatment for their child is being sought. For many parents, the option for school staff to just 'ring the mobile' is out of reach and having a child anywhere from several hundred to thousands of kilometres away and not being contactable due to phone outages is extremely concerning.

EXAMPLE 1

Member A - In March 2023 I was attending a virtual meeting utilizing the Zoom platform. Due to inclement weather, cloud and rain, as host I was unable to join the meeting using my satellite internet connection, however was able to dial in using my HCRC landline.

EXAMPLE 2

Member B - Our education port with Skymesh along with our Telstra phone connection, phone headsets and printer were struck by lightning causing severe damage to of all of the above equipment. It was reported to Skymesh that the black router/modem box is dead (has no lights) when powered up. This box was tested in another house and tested another box in the affected schoolroom, nothing works.

Skymesh have logged for a technician 1-10 days (but 2 weeks) due to our location.

Four children are trying to do Distance Education hot-spotting audio lessons off my phone with one to two bars of 3G and a prepaid dongle.



Power

Current telecommunications systems which our members rely upon, such as HCRC and copper services, do not rely on electricity to function. However, in many cases the equipment required to access digital communications technology requires electricity to work. Both mobile and internet services require power (especially if using fixed Smart Antennae or Cel-Fi equipment) and if there is a power outage the service cannot be relied upon and many properties that are on self-generated power do not run their generators 24 hours a day. Families in the bush need communication services from different sources as when a service is not working, it can be a long distance to assistance. ICPA (Aust) advocates for rural and remote families to have a minimum of two communications services (voice and data) that are independent of each other. When communications services are down, it affects children's education and business for these families as well as being a safety issue.

People living on non-mains power (due to geographic isolation, not "lifestyle") may have issues with an unreliable power source. Many properties still provide their own power via a diesel generator and/or solar. Many stations still turn their generators off overnight to counteract the exorbitant cost of fuel. If VoIP is to replace landlines, and there is no mobile coverage, those on non-mains power will have to get additional battery backup systems as the internet (and therefore the phone) is off if the generator is off. In the case of an emergency during the night the generator would need to be started and the system would need to power up prior to being ready for use – all valuable minutes in what could be a life and death situation.

Perhaps an even larger concern is the unpredictability of rural mains power. Power outages occur unexpectedly and frequently in rural and remote areas due to numerous causes including severe weather. These power outages can last for hours or even days. Unless all internet services are equipped with substantial battery backup, if landlines are replaced with VoIP, power outages would cause the internet to be non-operational for extended periods, and phone service through VoIP will also not be available.

A consideration could be the ability to utilise local services as a back-up. For example, if mobile towers or other new technologies that require power are on properties that have, for example, a generator, arrangements could be set up where that generator may be used to provide power at the flick of a switch.

Maintaining Services

Guarantee of repair and service must be maintained, particularly for customers living in rural and remote areas who cannot simply take their phone or internet modem/equipment to the provider's shop to instigate repair or replacement.

The provision and requirement to maintain services need to be transparent, easily found and understood as well as cover both voice and data connections. They must have processes defined and mandated so that if the companies bound by the safeguards, customer service guarantees, etc. do not comply with the standards set, there are repercussions and penalties for not meeting these targets. This could include automatic compensation for customers (who currently receive a little compensation at times if they complain adamantly and request it, however they have to be aware of the CSG terms in order to raise the issue).



These safeguards need to be enforced and providers held accountable. The 'relevance of these safeguards' is that if they did not exist, what obligation is there for communications providers to offer improved service and adhere to repair standards? Customers living outside of metropolitan areas do not have a large choice in service providers (if they have any) and it cannot be assumed that competition and wanting to keep customers in such a low population density demographic, would be enough of a driving force to ensure that communications companies prioritised repair times and tended to and resolved faults in an adequate timeframe.

When reviewing safeguards for communications and establishing parameters, the implications for rural and remote customers must be considered carefully and equitably.

ICPA (Aust) also recommends that there be a review of location zoning and restoration target times for nbn customers which currently is 3 days for Urban, 4 days for Regional, 10 days for Remote, and 90 days for Isolated area customers, to ensure that they meet community expectations. Our members feel that these internet service times should be aligned to the Telstra Restoration times of 1 Working Day - Urban, 2 Working Days -Regional, 3 Working Days-Remote, Isolated areas should be 10 Working Days.

In geographically isolated parts of Australia it can prove challenging not only to provide adequate communications services but to also ensure these services are maintained, repaired and reliable. ICPA (Aust) continues to advocate that, where educational delivery hinges on the availability of communications technology, it is essential that priority is given to the installation and maintenance Australiaer



EXAMPLE 3

Earlier this year (2023) Member C had recurring issues with their Telstra landline at their base at Mungindi. Telstra sent technicians a couple of times to check the problems, and all was well after the visit until the line would again drop out.

The last time they had an actual working phone line was the end of April 2023. One of the landline numbers has been diverted to the mobile phone of an external third-party person, the second landline is unusable. They have become accustomed to the lack of a landline and continue with the running of the business using the diversion. When it became very quiet in July /August they sought to have the landline issue repaired.

Telstra was contacted in August 2023 to advise that the phone line was not working again, and Telstra technicians would turn up on a specified date; most of the time this appointment would be changed, and it would be a further week or sometimes more for them to turn up.

Technicians have visited several times during September and October 2023 and although they are aware of the problem, they require further labour to dig up the line (approximately 400 metres) for repair. The Telstra technician advised that he was surprised the landline was useable prior to April as the problem existed well before then.

This is an ongoing problem that, to date, Telstra still has not rectified and the customer is still receiving a monthly invoice from Telstra for services that they are unable to use. There is still no expected date of repair. This needs to be rectified.

In rural, remote and regional areas there is now a large number of vacant homesteads due to landholders purchasing neighbouring properties and investors purchasing land. Rural properties which have vacant homes on them often still have electricity and phone lines connected. This has proven on a number of occasions to be helpful to both emergency services and locals. While it is a fairly easy process to leave an existing phone line in place for emergency use, property owners would most likely not pursue installing satellite internet and the equipment needed to provide phone service if landlines were removed and one more source of emergency communication disappears.

Protections

Where the adoption of new technologies requires a change to a customer's hardware, for example, the Next G Wireless Link (NGWL) Service using 3G technology that will be migrated to a 4G solution, customer protections are imperative. Processes need to be identified that offer security and integrity to customers during changeover periods to prevent customers falling prey to scammers.

EXAMPLE 4

Member D - I have a NGWL Service that uses 3G technology. I have had several phone calls from a suspected spam number, so I have not answered. Telstra have been texting me asking me to answer the call. I did answer one and I have never heard back from the person, so presumably he was a scammer. He told me he would be sending me a modem that I can DIY install. The modem has not turned up. I thought there is a dedicated team doing the installations.



3. To what extent do you consider mobile services are important to complement fixed services supported under the existing framework?

Expansion of mobile coverage is critical in rural and remote Australia. Most who question the relevance of the USO have referred to the availability of mobile service as outdated current legislation. Approximately 70% of Australia is not covered by the mobile footprint. The Mobile Black Spot Program (MBSP) needs ongoing government funding and the mobile footprint needs to be extended.

ICPA (Aust) considers that areas for future funding of the MBSP should be based on community input, believes nominations by Members of Parliament and local government should also be considered if they are lending support to community applications that are being put forward. Concerns have been raised that those communities that can contribute towards the installation of towers, equipment etc. may be prioritised over those areas who are not financially able to contribute. Some states and local communities do not have the means nor opportunity to seek joint assistance for securing Mobile Black Spot Towers due to the demographics of where they are (some areas have no large businesses such as mines to assist them with funding) and the composition of their community and outlying area. However, there can still be a great need for a mobile tower in the area, particularly if the area is one of the locations prone to natural disasters.

ICPA (Aust) believes that if communities along with their local government can show the need for a mobile tower as relevant to their situation, they should be considered on this merit for the MBSP regardless of whether or not they can also contribute financially.

Where there is a mobile service there needs to be an improved system for the monitoring of the battery back-up capability. While there is a replacement program it is based on the age of the battery. This is not really an accurate benchmark, and sometimes it is only when there is a disaster that it becomes apparent the battery back-up has failed.

A reliable, affordable, resilient mobile network service will go a long way to providing an alternative means of voice communication (meeting the requirement of two independent forms of delivery) if you are also on voice satellite. However, ICPA (Aust) notes, both services still require power to operate.

Limited Mobile Coverage

Despite ICPA (Aust) seeing merit in mobile roaming during times of emergency and natural disasters where this is possible, we reiterate that many of the families represented by ICPA (Aust) currently have limited to no mobile coverage at any time. While we welcome the move to improve communications during challenging times, focus must be placed on expanding general mobile coverage to those locations where it is not available at all and this should not be forgotten in lieu of a concentration on providing roaming. While 99% of Australia's population is said to have mobile coverage, in reality, only 27% of Australia's landmass is within the mobile footprint, leaving vast areas without any coverage.



If communities, along with their local government can show the need for a mobile tower as relevant to their situation, they should be considered on this merit for the Mobile Black Spot Program regardless of whether or not they can also contribute financially.

Due to the vastness of our country, it is difficult to nominate specific areas for the priority of the installation of mobile services owing to so many locations being without service. Many of our members have no access to mobile services on a daily basis from their place of residence. There is no doubt about the need for the expansion of mobile services in order to enhance daily communication activity for these people.

4. Which existing requirements under the current universal service framework should be retained, or changed?

For the inhabitants of many remote areas reliant on Copper or HCRC services, the mandated right to a fixed telephone service is extremely important. The Copper Continuity Obligation needs to remain until an appropriate, affordable and reliable substitute arrangement is in place.

Continuing with an agreement such as the Telstra Universal Service Obligation Performance Agreement (TUSOPA) is essential to ensure that people living outside city centers have adequate, affordable and reliable communications to a baseline standard. A reliable form of voice communication service which is independent of internet needs to be available to all who live in rural and remote areas.

The supplementary safeguard to the USO, the Customer Guarantee Service (CGS) timeframes and associated benchmarks for connection, repair and appointment keeping must be retained to assist with the provision of a quality service and should be extended to include all fixed line services and fixed wireless services (broadband).

Telstra should continue to be required to offer CSG services and all other providers of voice services utilizing fixed line services and fixed wireless services (broadband) should also be required to adhere to providing CSG services.

Performance benchmarks are an important part of assessment of performance in providing quality USO services. However, this requirement is only triggered once the threshold of 100,000 customers is reached, which may not be capturing sufficient providers.

Priority Assistance to households with people diagnosed with a life-threatening medical condition is an important service and should be retained.

Carrier licence provisions that currently apply to Telstra should continue and should be extended to apply to all licenced carriers.



EXAMPLE 5

We have had an ongoing issue with our phones for over 12 years (since we bought the place). Every wet season (and often in between) we get a horrible screech and static and then the call often drops out. The phone then can be out for hours, days or weeks. Since it sometimes comes back on of its own accord, they then close the case but the problem is not actually fixed, it could happen again 5 minutes later.

It has taken literally years for Telstra to even look at the issue properly and we still do not have a proper solution. We are on the radio phone network and they have almost no one left who knows how to fix this system, so they are robbing parts from some areas to fix others.

5. What role do you consider payphones should play in a modern universal service framework?

Payphones should be considered in a USO in the same manner as baseline voice services.

6. How should affordability be considered?

Safeguards must be in place to ensure that small operators coming into the market place have sufficient financial substance and capacity to provide and maintain the offered services for the long term.

Customers should continue to pay the same price for a baseline service regardless of whether they reside in an urban, regional or remote area of the country.

Affordability is more than just a price point; it must be capable of providing the service that is required and it must be fit for purpose.

For families who reside in rural and remote Australia, equipment over and above the standard requirement is often needed to be purchased to access new technologies. An example is the requirement for a Cel-fi booster needed to access mobile services, which now need replacing as services change from 3G to 4G/5G.

For a metropolitan customer, a change of technology such as the move to 5G from 3G may require the replacement of a handset, however, will otherwise have very limited impact on their communication services. However, for rural and remote customers who require extra equipment to access technologies, which they must fund, access and install themselves, such a change is far more impactful and the provision of assistance, for example rebates or subsidies, would ensure these customers are not left behind as new technologies are developed and adopted.

New Sky Muster Plus plans offer more budget friendly alternatives, giving people a more affordable back up option. However, ICPA (Aust) has concerns that the slower speeds inhibit/make VoIP



unusable or if it is usable as VoIP service internet speeds are very poor. This is unacceptable if offered as the only means of connection to education, emergency services or for running a business.

Even when not shaped by the Fair Use Policy, Voice over Internet Protocol (VoIP) via satellite internet connection is not deemed suitable for the voice component of Distance Education “On Air” lessons at present by Departments of Education. VoIP through satellite internet can be problematic due to latency for things such as music, Language Other Than English (LOTE) lessons and possibly some specific needs sessions with therapists as well as the day to day class lessons which can include students on a mix of services. Distance Education families have commented that they are encouraged to use the alternative phone service rather than VoIP for their students’ lessons; for the majority of families, this would be a landline phone. For children who have no regular opportunities for interaction with their class teacher and other children, “On Air” lessons are an important part of the daily schooling and it is extremely frustrating when internet outages cause students to miss their lessons and the chance to interact with fellow classmates. As things currently stand, even if the internet is not working for the visual portion of a lesson, families can “dial in” for their Distance Education lessons via their landline so that students can still participate with their class in the lessons.

With an increase in new technologies and consequently providers, there needs to be information advertised about the retail service providers, who differentiate their services in terms of price, quality, content quotas and value-add services. Historically, customers signed up with whichever provider was marketing in their area at the time and it is now very obvious that there is a huge difference in offered customer service and actual service provided amongst the RSPs that venture to inland Australia.

7. How can a modern universal service framework deliver better outcomes and meet digital inclusion needs of First Nations Australians?

No comment.

Conclusion

Equitable educational opportunities in rural and remote locations hinge upon the availability of high quality, reliable, affordable and adequate telecommunications. The delivery of voice and voice over internet services need to be in two different forms, independent of each other, especially for those without a mobile service. Depending only on satellite service, no matter the type, is not good enough and the need for systems that do not require or have their own back up, reliable power supply is essential.

Once again ICPA (Aust) thanks the Federal Government for the opportunity to contribute a submission to this Review.