

Isolated Children's Parents' Association of Australia Inc.

"Access to Education"



Submission

to the

Regional Telecommunications Independent Review Committee

into the

Regional Telecommunications Review 2018

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 *Regional Telecommunications Review 2018* identifying issues relating specifically to rural and remote students.

Since 1971, ICPA (Aust) has represented families living in rural and remote regions of Australia, who are passionate about the sustainability and prosperity of the industries they work in. Research indicates that the ability to access affordable and appropriate educational services plays a major factor in determining if a family will remain in rural and remote locations. The goal for our 2700 member families is to achieve equity of educational opportunity for all children living in rural and remote areas, thus ensuring they have access to a continuing and appropriate education determined by their aspirations and abilities rather than the location of their home.

Remote and isolated locations in Australia provide the greatest challenges for improving provision of education options and pathways for children and families. Improving the educational outcomes for rural and remote students requires a national approach that ensures educational delivery of a consistent high standard no matter where the education is provided. The financial cost to families educating children in rural and remote locations continues to rise and can be attributed to many leaving these areas. An increasing number of rural and remote families are separating with the mother and children relocating to larger cities and towns during the years of schooling. A drastic measure such as this by families to reduce educational expenses, negatively impacts the family unit, small communities and rural schools.

Rural education is interlinked with other aspects of rural communities, such as fluctuating populations, economic influences, seasonal conditions and climate. It must be recognised that attempts to address inequities in the provision of quality education would not be effective unless broader economic and social issues are also considered. In order to efficiently and effectively meet the needs of these students, inequity issues must be understood. Some of these children are not considered vulnerable because they are not impacted by extreme levels of poverty. Rather, due to geographic isolation from services, many rural and remote families are expected to cover out-of-pocket costs for the education of their children from early childhood through to tertiary education, which is not experienced by urban families.

While all Australian governments recognise the social and economic benefits of a high quality and equitable school education system, ICPA (Aust) continues to devote an enormous amount of volunteer hours holding relevant governments to account to address inequities. Much of this can be attributed to many programs not reaching locations where the programs are costly to administer and jurisdictions not providing additional funding to ensure program objectives are met. Poor communication services also impact greatly on what is available to students and while internet services continue to improve, access for rural students lags well behind that available in metropolitan areas.

Appendix 1 — List of questions- FROM RTIRC ISSUES PAPER

1. What are the main barriers to people in regional communities increasing their use of digital technologies and possible solutions for overcoming these barriers?

Increasing the use of digital technologies in regional communities hinges upon overcoming barriers which affect both their ability to access technology, along with the limitations of the technology available to them. Key population issues in these areas such as decreasing and ageing populations are fundamental barriers to the uptake of digital technology use. Many regional young people must move

away from home to study not returning for many years and the lack of adequate digital technology may prevent their return. People in regional, rural and remote areas may lack knowledge or experience of how to use technology or what it can be used for. Often opportunities are limited in these locations to gain knowledge/experience, due to distance from urban centres and limited resources within the communities. In more populated areas, people can learn about new technology and its uses by seeing it demonstrated by other people and friends sharing information, hints and tips. This is not possible in more remote areas where people often do not see each other for a long time and when they do get together, rarely spend the short bit of time to talk technology. The workforce often works from dawn to dusk and the availability of a help desk, to offer support and maintenance, which is only open during office hours is not compatible with their lifestyle. However, if a help desk was accessible 24 hours per day, it would offer more accessible assistance for these families.

Coverage limitations for digital technology connections in regional, rural and remote locations are also a factor impacting on its use. Availability of satellite and mobile technologies are dependent upon access to the equipment and hardware required for a connection. In rural and remote areas, separated by expansive distances, this means that often accessibility is limited, leaving much of the area without access to the required technology. This also makes it difficult to retain people in these areas where mobile and internet coverage is limited. An expansion of coverage of mobile and internet service would therefore increase digital technology use in these areas. For example on a 50,000 acre property, a Sky Muster service at the homestead is not accessible at a nearby staff residence and an intermittent 3G connection using a Yagi antenna and Cel-fi booster does not even work in every room of the house. On the remainder of the property there is no access to satellite or mobile coverage.

Another barrier to digital technology use in regional and rural areas which cannot be overlooked, is the data limits in place for satellite services and the exorbitant cost of mobile services. This is especially true when residents require their connections for educational, personal and business use. Even with the doubling of data for nbn Sky Muster™ customers in 2017, families still struggle to remain under their data limit each month trying to balance education, home, business, staff and visitors' needs on one plan. Despite the data capacity increase, the Fair Use Policy (FUP) is still limiting for nbn Sky Muster customers, especially if they have students studying who do not have access to the Education Service. The introduction of the Education Port for distance education families has gone a way to alleviating this issue, however this needs to go further and be made available to include all students in rural and remote areas - whether at small rural schools, home from boarding or studying tertiary (either online or at university). Sadly for rural families, a number of students do not come home on school breaks now or shorten their breaks in order to remain at school/university to complete assessments as they cannot access enough internet at home. An additional bonus for many families with a mobile internet connection has been Telstra's initiative which has seen the unmetering of educational websites. ICPA (Aust) members have been thankful for Telstra unmetered Education sites and this has assisted many families who need to access their curriculum this way by allowing them to reduce data usage significantly. However unmetering also needs to be expanded to educational sites accessed through nbn Sky Muster™ satellite and other internet services.

Peak and Off-Peak times for Sky Muster satellite internet users are difficult to work with and extremely difficult to explain to those not familiar with regional communications. It is also very difficult to explain this limitation to "outsiders" about the data limits in the bush as most just do not understand that there is a FUP or what "peak" times mean. With only one data plan available for an entire family/residence, it takes quite a bit of management to ensure families do not go over their limit each billing cycle. Those visiting from regional or metropolitan areas do not understand that the 'normal' things they do, eat up data and that those on nbn Sky Muster™ have data restrictions for their services. Rural and remote families really struggle to explain this limitation and the need to conserve data to

people who are so used to having access to unlimited data or free Wi-Fi. It is also difficult to explain that once shaped, that the speeds slow down to a nearly unusable state and this is what the family must deal with until the billing cycle rolls over. All these factors restrict much of our members' ability to conduct their business or study unless they are a distance education student with access to the Education Port.

A further barrier to digital technology use in regional, rural and remote areas is the concern that in order to access these services, the equipment required needs 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, which are frequent in rural and remote areas, 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 business and education for these families as well as being a safety issue.

Weather can also be a barrier to the use 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 but 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. Some customers are also reporting that they are not getting the speeds they were promised for internet and this is very frustrating for those living a few kilometres from the "city". VoIP going out in storms and for a long time afterwards has also been mentioned as a being a problem.

There is currently a gap in understanding, individual problem-solving and knowledge broker services for telecommunications in rural and regional Australia, which in turn affects rural students. Rural users are struggling to keep up with changing telecommunications, infrastructure, plans and providers. Rural and remote telecommunication users require support for understanding new internet and phone options and a 'third-party' problem-solving resource to identify best solutions, best providers and best plans in different locations.

Educational outcomes in small communities are continuously being hindered by the absence of adequate internet connectivity in their local schools. Curriculum offerings which cannot cater for face to face interaction due to the lack of specialist teachers (e.g. languages, music) cannot be accessed consistently, or if at all. Online access to services like speech therapy and other Allied Health offerings cannot be relied upon to complement the sparse face-to-face services in small communities. Online NAPLAN, which is due to be rolled out across all states in the near future is reliant on the availability of adequate bandwidth for students to complete the assessment online. This is may be problematic for many rural and remote schools. Furthermore, the access for rural and remote secondary schools to a full senior curriculum where courses are sourced externally, is also not possible in many schools due to unreliable internet.

2. How are people in regional communities currently using their broadband service and how might they increase the benefits of using this technology?

In regional, rural and remote communities, people are using their broadband connections for a range of purposes: Wi-Fi calling, banking, financial and stock/crop recording, telemetry, tractor work, ordering machinery parts, groceries and shopping, websearching, further education and live-streaming if there is any remaining data and importantly for compulsory educational purposes. Many distance education students utilise nbn Sky Muster services for internet lessons with their teachers and other educational opportunities. Currently some of these students also utilise VoIP on their internet connection for their lessons, this is proving to be unreliable and problematic due to latency and other issues. Ongoing access to a landline is essential for these students to ensure the best possible educational outcomes. Distance education tutors also need to be able to contact the school for help and support; where VoIP services and mobile coverage are either unreliable or completely unavailable, landline access is essential. This is also true for small rural schools that are dependent on landlines for contact for teacher support, emergencies and the general administration tasks of a school. There are quite a few rural small schools which are not in mobile coverage areas and struggle with receiving adequate internet service. Ensuring VoIP, mobile and other similar services were available, reliable and with minimal latency would increase the uptake of this technology and in turn the benefits of using this technology from an educational perspective.

An expansion of the availability and coverage of mobile and internet services would also mean that those in regional and rural communities would be able to utilise the services more readily, as well as receive verifications from government departments, banking and Google by SMS, which are increasingly required these days. With regards to rural and remote education, having mobile coverage is highly valued by those who have it as it affords a backup for the voice and data services of “On Air” lessons when landlines or other internet sources are out. Having mobile coverage also allows distance education students to continue their schoolwork and lessons if they are travelling between home and town or away from their main schoolroom (i.e. in a stock camp for a few weeks with their family) and allows the use of portable devices such as tablets and smart phones which would be beneficial for some families. The addition of many educational sites being unmetered by Telstra is a bonus for many families that are able to access their curriculum this way.

Data limitations are problematic for users of rural health and telehealth. A North Queensland family had four children doing Specific Needs sessions with professionals but could only do limited sessions due to data limits. ICPA (Aust) would like to see Telstra initiate unmetered sites for health and specific education needs, similar to the unmetered education sites. Also, for nbn Sky Muster™ families to be able to access extra data packs or a Medical Port similar to the Education Port for those with Medical or Specific Education Needs.

3. What data-intensive activities are occurring in regional, rural and remote Australia? What digital technologies are needed for these?

Education in rural and regional communities is by far one of the most data-intensive activities, especially with a move to digital and online education. In order for these educational activities to be successful, reliable, accessible and affordable internet is paramount. Nbn Sky Muster™ Education Port, offered as part of nbn’s public interest premises policy and Telstra’s unmetering of educational sites has assisted to ensure educational activities are available and accessible for some students; however this needs to go further. The Education Port is now accessible to Preschoolers/Kindergarten 4-year-old students studying by distance education but needs to be extended to other early learning students, rural schools, boarding school students as well as tertiary students returning for holidays / remote work placements.

Additional nbn Sky Muster™ Data Packs over school holidays have been very welcomed but only one provider at the moment offers this and it is still possibly not large enough, as students who must go

away for schooling are used to a different amount of data at school than the amount they are limited to at home.

There is also the mode of delivery to consider and what is offered by each State Education Department: Western Australia use Centra Symposium, which South Australia found unsuitable. South Australia use Webex, the Northern Territory and New South Wales use REACT a purpose-built Distance Education delivery program whilst Queensland use Blackboard Collaborate. There needs to be more co-operation between states so that the wheel is not constantly being reinvented. It is also essential that with a digital curriculum, each platform for delivery provides equitable access and quality for students across Australia.

Our member families also attend small rural schools that are dependent on internet for schoolwork, research, teacher assistance/mentoring/support, specific needs sessions and general administration tasks of a school. Adequate internet service for all schools is essential, be this via satellite, mobile or other technologies.

4. How can regional businesses better utilise digital technologies to maximise economic benefits?

No comment.

5. What can be done to improve access to and uptake of telecommunications services in remote Indigenous communities?

There needs to be a dedicated regional, rural and remote Communications Help Centre for all regional, rural and remote customers. The offering of telecommunications support services, including advocacy, education and problem solving with technology issues and opportunities, in rural and remote Australia would be of huge benefit for all regional, rural and remote students and their families. A Regional Rural and Remote Communications Help Centre is urgently needed. Customers are struggling to work out the fault process for reporting internet faults and phone faults can be problematic to report as well. Having access to a help centre that can assist with addressing communications faults as well as provide product knowledge specifically relevant to those outside of metropolitan areas would benefit regional, rural and remote customers greatly. At the moment, many people are relying on volunteer services such as Better Internet for Regional, Rural and Remote Australia (BIRRR) and advocacy groups for assistance with their problems and questions. While these groups do a tremendous job, they are volunteers and their longevity is possibly not sustainable due to risk of burn out due to overload. ICPA (Aust) believes that **priority internet repairs for Distance Education students** residing in rural and remote areas must be factored into policy as currently students can be offline for many weeks waiting for their service to be repaired.

6. Are there practical examples of how communications services can improve the well-being of people in remote Indigenous communities?

Communications services including telehealth and video-conferencing provisions are essential for the well-being of all residents in regional, rural and remote communities.

Regional Development Australia (RDA) states that there is 67% youth unemployment in Outback Australia and that they feel access to future education is indicated as a way to address this unemployment. By improving communications services in outlying areas, and offering affordable, reliable and sufficient services, students can hopefully reach their full potential and gain meaningful future employment.

7. What skills do people need to get the most from their digital technologies, and where can they learn these skills?

In rural and remote areas, where access to support services for digital technologies is limited for a range of reasons, residents are required to know more about their internet than anyone in the city, where it just “works”. In these areas, people need to know speed, ping, upload, download, what beam they are on, data usage amounts for day-to-day activities and the knowledge to monitor this, be able to reboot a Network Termination Device (NTD) and be ICT savvy to check out faults. Often from an educational perspective, due to distance from service centres and requiring prompt solutions for problems in order to continue schooling activities, families must often troubleshoot their own technologies, with perhaps only some offsite guidance to assist them. It is therefore imperative that these people have considerable technology skills. Schools often provide skill development for these families, either onsite or within provided resources. ICT training in basic computing, office programs such as Word or Excel, financial programs in order to assist running own businesses, tax etc. can also be accessed from courses online (for which adequate internet is essential) or from travelling mobile vans staying a few days in small communities as they pass through from TAFEs up to 900kms away. (This actually occurred in the mid-90’s in Birdsville in far SW Qld - a terrific experience and much appreciated by all). The provision of a Regional, Rural and Remote Help Centre can also assist where people require support.

8. Have you had ongoing issues affecting your satellite or fixed wireless broadband service? If so, how have you overcome these issues?

Aside from the need to often overcome technology issues independently – ‘self-help’ - volunteer groups play an integral part in solving ongoing issues with services. Teams such as ICPA and BIRRR often provide people in these areas with a range of support services either directly or by contacting other relevant personnel who can assist. Distance Education or School of the Air Centres can provide some assistance to families experiencing issues. Also customers are directed to contact their service providers for assistance.

9. If you are in an area with access to the Sky Muster satellite service and you have not taken it up, why not?

Most families would have taken nbn Sky Muster™ services up as they would have had no other option for internet service once the Interim Satellite Service (ISS) was turned off. Many rural and remote families needed a one stop shop to contact support re installation, connection, troubleshooting etc. especially as initially many installers did not turn up for their appointments. Many are still confused about who to contact with issues - the provider or nbn, although those who have been utilising it for some time likely have an understanding of this by now. The reasons why people have not taken up the nbn Sky Muster service where it is available have largely consisted of concerns with issues associated with its rollout and perceived problems associated with the connections. Others may have felt that as they already had a service of another type, they did not believe they should access another. Some of these perspectives are highlighted in the below quotes from ICPA Members.

“Originally I stuck to 3G during the rollout as all I was hearing and seeing was the faults/issues with the service and hassles with the installations and thought well I have something that is working I'm not going to change it especially because I just could not afford the disruption to the children's education. Secondly, I counted myself as being fortunate in that we had at least one semi reliable source of internet whereas others had none and felt that the initial roll out would be more beneficial to those so I didn't want to "clog the system" and held back.

Ironically I have had so much drama and interruption to schooling and our business with our 3G that I wished I jumped on the band wagon and got satellite so I had two sources of internet hoping that when one wasn't working the other would be. Which yes means two bills for the one product being used half the time. Again pretty disappointing that you have to pay for two services just to get one. “
Distance Education Home Tutor

“I have really reliable 3G service and I heard stories about how long and drawn out the nbn process was so I decided not to worry about it. However the cost of our 3G service is exorbitant and I am now going through the process of applying for a nbn service.”
Distance Education Home Tutor 2

While the families providing the quotes above have the option of using a 3G mobile service, albeit unreliable at times and very costly, many rural and remote families do not have this option of a mobile broadband service and nbn Sky Muster™ satellite service is their only means to access internet.

Some of our members are experiencing problems with ongoing use of the nbn Sky Muster™ satellite services including dropouts, poor speeds, slowed services, insufficient data amounts and connection difficulties. Commonplace online activities for those living in cities such as watching lectures, banking, cloud computing, working on research projects, or watching television can be nearly impossible for those in rural areas and even those who sometimes are not very far from the cities themselves. Nbn Sky Muster™ is still unreliable for some families, this may be due to some having had faulty installations, faulty equipment or sometimes problems with the provider. Recent software updates and “blue light outages” have also been problematic. Families often do not know where to turn when their service is not working and dread spending lengthy amounts of time on the phone waiting for assistance or call backs that never come. All of these things dissuade others from taking up the service, although for many people in rural and remote Australia, Sky Muster is the only available service and is their only way to receive internet.

10. What economic or social indicators could be used to guide investment to further improve mobile coverage?

Expansion of mobile coverage in mobile black spot areas, and recognition of areas which are outside mobile coverage where a rural school is located need to be considered a priority in any future Mobile Black Spot Program (MBSP) funding. The support of this program and the essential mobile service that it provides to communities should be not dependent on economic returns but rather be based on where the need lies and most benefit can be attained.

11. Is information readily available regarding how to use devices to improve mobile reception in areas with poor coverage? E.g. information about external antenna equipment?

Again, most of this information can be accessed online, though a Regional, Rural and Remote Help Centre could also assist with this. Telstra do a good job of this but people need to know where to look. Also, people may ask when they go to an urban centre, however this can be problematic as often the staff in urban areas have no idea of rural and remote situations or applications to suggest such as Wi-Fi calling.

12. What emerging digital services will be of most benefit to regional businesses and what are the data needs of these services?

No comment.

13. What broadband services are people using other than those available through the NBN?

Besides nbn services, mobile broadband is also used by some families in regional, rural and remote Australia, however, with mobile service very limited and a large portion of Australia having no mobile coverage at all, the amount of people outside urban and regional centres that can utilise reliable mobile broadband is quite limited.

14. How can more competition be encouraged in the provision of broadband services in regional Australia?

There are an increasing number of RSPs for the provision of nbn Sky Muster, also Fixed Wireless, which is available in some rural areas. Telstra still has a much broader accessible Mobile network than other providers in rural and remote areas, so there is little competition there.

Additional notes

Connectivity is key to regional, rural and remote areas and any review into regional communication cannot discount the importance of telephony, via landlines, mobile or other means.

Telephony - Landlines

Telephony is a major concern particularly for those students studying via distance education. Landline telephone services play a significant role in providing the voice services to accompany 'on air' lessons with teachers and classmates, as well as additional lessons and seeking assistance from teachers at the School of Distance Education Centre. Because 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 distance education students. When internet services fail, the availability of landline phones ensures that distance education students still have connectivity and are able to continue participating in their lessons, even if the video/online portion is out. At this time, VoIP is not considered to be a reliable or suitable source for audio in distance education lessons, and until such time as an alternative, appropriate and reliable voice technology is available, landline telephony services need to exist for distance education students.

Whilst 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 and therefore telephony linked to internet. ICPA (Aust) member families also attend small

rural schools that are dependent on landlines for contact for teacher support, emergencies and general administration tasks of a school. There are quite a few rural small schools which are not in mobile coverage areas and thus need landlines access.

As geographically isolated students rely so heavily on landline telephone services for their schooling, it is essential that these services are available to them and in good working order. In past years, delays in having a landline established in distance education schoolrooms was very problematic for some families. It is also critical that telephone service repair times are kept to a minimum to ensure students' learning can continue.

Mobile service coverage in rural and remote areas

ICPA (Aust) welcomes the government Mobile Black Spot Program. The selection of priority regions for the implementation of Mobile Phone coverage should include a **priority for rural and remote schools** currently without mobile phone service. Not only do these schools provide education in their areas, however most rural and remote schools are evacuation points in the event of emergencies occurring in the district. Furthermore, it means schools have difficulties in attracting staff due to lack of mobile coverage which is considered a basic service now by most people. Even in areas where mobile coverage is available, this is hindered and limited by a number of factors including issues with shrinking coverage, the fact that the 4G footprint is smaller than the 3G footprint and illegal boosters' signal pulling signal from locations. Furthermore many rural and remote residents require extra equipment to be able to access the services. This can be costly and may not always be reliable.

Concerns that have been raised regarding mobile services is that the 4G footprint is smaller than 3G footprint and as 3G fades away, families that once had good coverage in their location now find themselves with less coverage.

Illegal boosters and repeaters are being used which pull signal and affect unmetered education sites for students. Often people purchase repeaters/boosters not realising that they do not conform to Australian standards and are actually illegal. Customers think that if it is available for sale, it must be okay. More information needs to be presented to consumers to explain the consequences of the use of illegal repeaters/boosters as well as making purchasing the legal technology competitive in price and ease to secure. A subsidy that assists with the purchase of legal boosters and repeaters might see more people take up these options.

Conclusion

A whole of government solution is needed to ensure that adequate, reliable and affordable communication services are available to those living in regional, rural and remote areas. This goes to the very heart of keeping our rural communities and schools alive. Connectivity is the silver bullet which will serve to provide the type of essential services such as education in rural and remote locations which families expect and deserve. It is essential that services are reliable and consistent as well as adequate in terms of speed, quality, capability and cost to ensure telecommunication services and digital technology in regional, rural and remote areas are comparable with those in urban areas. Connectivity needs to be a priority for state and federal governments so that we can ensure the gap between urban and rural communities, and especially the education of students in these communities, does not continue to widen.