



# Briefing Papers

## Communications Portfolio

The Isolated Children's Parents' Association of Australia, ICPA (Aust), is a voluntary, apolitical, national parent organisation working on behalf of our members for equity of access to appropriate education for children living outside of metropolitan areas.

ICPA (Aust) has nearly fifty years' experience advocating for educational issues on behalf of families living in rural and remote Australia. Our organisation is well positioned to contribute to the discussion on rural communications from a user's point of view. The majority of families ICPA (Aust) represents fall into the category of the approximate seven per cent of premises in Australia that will be serviced by either fixed wireless or satellite internet connections.

Families living in rural and remote locations frequently use their homes as the base for their businesses with the home often doubling as the classroom for distance education students as well. For our members, access to adequate, affordable and reliable internet and telephone services is vital for the delivery of education, accessing government services and for enabling enterprises to conduct their business.

ICPA (Aust) has strong and clear views on the communication requirements for the non-urban population, which have come about due to the inequities experienced over the last decade or so in comparison to available metropolitan services.

### SUMMARY

1. Adequate, reliable, affordable internet connectivity needs to be provided, maintained, improved and expanded for all students educated in regional, rural and remote locations, whether by distance education, in a small rural school or at a tertiary level.
  - Internet services for regional, rural and remote students continue to be enhanced, improved and expanded such as the recent development of Sky Muster Plus Premium. Due to the nature of education in geographically isolated locations, rural and remote student's need for connectivity is great and their education is often reliant on these services.
  - Data allowances in rural and remote locations should meet the needs of all aspects of education, including special needs (e.g. speech therapy), music and other extra-curricular services which are more easily accessed by urban student counterparts.
  - Services need to be reliable, so families do not have to pay for two service providers.
  - Fault reporting and repairs need to be prioritised (both internet and phone) for rural and remote students as their schooling is dependent on these services being available.
  - The provision of an affordable and reliable transportable satellite internet (Sky Muster or similar) service solution for geographically isolated distance education students who do not have a permanent address or location.



2. The establishment of Low Earth Orbit (LEO) satellite under nbn obligations for remote Australian students, including price certainty, network and data sovereignty and local support.
  - Low Earth Orbit satellites to be established under nbn obligations.
3. Telephony Services need to be provided and maintained in regional, rural and remote areas.
  - Continued provision and maintenance of landlines in rural and remote areas is essential, especially where mobile coverage is not available and until such time as viable alternatives are made available to all areas.
  - Areas containing a rural school be prioritised in expansion of Mobile Black Spot Program coinciding with continued support and funding of the Mobile Black Spot Program.
  - Universal Service Obligation and Universal Service Guarantee conditions should be met, penalties enforced and include data and voice services.
  - Funding/rebate for rural and remote people who must upgrade their devices and infrastructure to access basic communication services for education purposes.
4. It is essential that families living in rural, regional and remote Australia have access to communications services commensurate to their needs and comparable to those provided in urban areas.
  - Rural and remote families must have access to two sources of communications (i.e. voice and data must be separate services).
  - The Regional Tech Hub needs to be maintained and supported to assist rural and remote families with communication issues, questions and services.
5. An action plan must be devised including an appropriate timeline should the switch from 3G to 4G not deliver the 'equivalent or better coverage'.
  - A noticeable reduction in service coverage area has been observed whilst the transition from 3G to 4G has been implemented on local towers.
  - Emergency calls are not being able to be made where there has been a reduction of service.
  - There is increasing uncertainty whether rural and remote families who only receive fortuitous 3G coverage will receive coverage on the 4G network.

#### ISSUE 1 - Adequate Internet Connectivity for all Students Educated in Regional, Rural and Remote Locations

ICPA (Aust) is aware that delivering services to the rural and remote population similar to what is available in metropolitan areas, is far more expensive and time consuming to deploy. Therefore, it is essential that the capacity of the nbn Sky Muster Plus Premium services are sufficient for both current and future demand. The roll out of nbn Sky Muster Plus Premium services have been welcomed but not without problems. Service provider call centres and volunteer groups have been overwhelmed at times with requests for assistance with problems that they often have no control over. A dedicated rural and remote communications information hub with trained staff that understand rural and remote needs will assist immensely with these issues. The continuation of the Regional Tech Hub has been widely welcomed and this service should be maintained and well supported. Other forms of assistance such as nbn Local and the Telstra Regional Advisory Network, have also been a step in the right direction, however these services can be difficult to access for the average customer without an organisation or contact relaying the



information. Volunteer groups such as Better Internet for Regional, Rural and Remote Australia (BIRRR) have provided a tremendous advisory and support service, however, they cannot continue to deal with the number of cases they are presented with, nor should they be required to.

ICPA (Aust) supports nbn Sky Muster initiatives to assist with education needs (i.e. the Sky Muster Education Service, Sky Muster Plus and Sky Muster Plus Premium). The Education Service or 'Ed Ports' have and continue to provide dedicated services for some geographically isolated distance education students. ICPA (Aust) acknowledges that for connections that are required for education purposes, a Sky Muster Plus Premium service is a comparable solution for students unable to access the Education Service such as tertiary, boarding or small rural school students, with the unmetered content providing greater download capabilities. Information about Sky Muster Plus Premium and what it offers should be more widely promoted to help rural and remote families decide it if may be a better option for their students. For rural and remote students who require internet access for education, their service must remain affordable and accessible, therefore ICPA (Aust) supports the continuation of subsidised Sky Muster installs to ensure geographically isolated students are able to access an internet service. Where a family is eligible for a Sky Muster service, they are automatically also eligible for a Sky Muster Plus Premium plan, however these Plans are not available with all Retail Service Providers (RSPs).

Reliable communication internet connectivity is paramount for the education of rural and remote students. Currently, some families are maintaining two different providers of internet, to ensure reliability. Some families are paying for services provided by both nbn and Starlink, so if one drops out the other may still work. This is reflective of the historical unreliability of internet services, poor product and provider choices as well as large wait times for installation of hardware for new services, or repair of equipment. Families should not be having to pay for two internet connections due to the unreliable nature of internet connectivity in the rural and remote areas.

It is critical that internet and telephone service repair times are kept to a minimum to ensure students' learning can continue. ICPA (Aust) requests a priority installation and repair service be in place for families educating their children via distance education due to geographic isolation. Fault reporting and repairs need to be prioritised (both internet and phone) for rural and remote students as their schooling is dependent on these services being available.

ICPA (Aust) also seeks the provision of an affordable and reliable transportable Sky Muster service solution for families who do not have a permanent address or location for distance education schooling, i.e. in stock camps, fencing camps, droving, etc. Some geographically isolated distance education students face further isolation as they are unable to participate in online lessons due to unavailability of Sky Muster when a family does not have a permanent address or dwelling to affix it to. With distance education now largely delivered in an online platform, access to the curriculum and resources, along with maintaining contact with teachers and peers, is essential for distance education students so that they can keep abreast of lessons and have consistency in their lessons. The students impacted are few, however these are students whose educational opportunities are already impeded by being some of the most isolated students in Australia and to be further disadvantaged from accessing their schooling due to the inaccessibility of internet exacerbates this. A transportable means of delivering internet is needed for these types of families to ensure that their students can join in online lessons, interact with classmates, and keep up with schoolwork. The emerging Low Earth Orbit satellite (LEOsat) technology is providing transient families with alternative choices for internet connectivity however, unlike the Sky Muster hardware costs, currently there are no subsidies to assist families with costs associated with the use of LEOsat technology.



ICPA (Aust) encourages all governments and service providers utilisation of existing communications infrastructure and resources, (particularly in rural and remote areas) to provide alternatives to satellite internet delivery. This would allow more customers to access fixed wireless internet services and other alternative, viable internet solutions in rural and remote areas and reduce the number of people dependent on satellite internet, further reducing the risk of future satellite congestion. ICPA (Aust) acknowledges the expansion of the nbn fixed wireless network which has transitioned some customers from satellite to fixed wireless, creating the opportunity for the unmetered Sky Muster products. However, internet connectivity demands are increasing at an exponential rate, so the fixed wireless expansion program must continue.

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, Territory 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.

#### **RECOMMENDATIONS**

- That adequate, reliable, affordable internet connectivity to be provided, maintained, improved and expanded for all students educated in regional, rural and remote locations, whether by distance education, in a small rural school or at a tertiary level.
- Services need to be reliable, so families do not need to pay two service providers.
- Fault reporting and repairs need to prioritise (both internet and phone) rural and remote students
- That an affordable and reliable transportable Sky Muster or alternative satellite technology service solution is made available for geographically isolated distance education students who do not have a permanent address or location.
- That resourcing and installation of Sky Muster satellite internet continue to be subsidised to ensure that rural and remote families who may have no other option for internet available to them can access a service.

#### **ISSUE 2 – Low Earth Orbit (LEO) satellite under nbn obligations**

LEO internet services offer many advantages over geostationary satellite internet. These advantages are becoming increasingly important to the education of children in rural and remote areas of Australia, for example, the ability to use low-latency videoconferencing.



Some global providers are starting to offer internet plans in Australia but often do not provide local support. NBN Co is looking at opportunities to bring offerings to Australia under the nbn banner. ICPA (Aust) believe it is important that NBN Co considers these partnerships seriously and not just allow private companies to dictate what is offered here in Australia. The NBN Co Ltd Statement of Expectations 2022 states, “NBN Co is expecting to be undertaking proactive network planning, including for the transition of satellite services, and positioning itself to utilise emerging and future technologies to meet future demand, promote innovation, improve services and generate efficiencies in service delivery.....NBN Co should take an active role in supporting telecommunications sector security.”

Data security and resilience are at risk where wholesale internet services are provided by international private or government-owned companies. NBN Co has the opportunity to set the standard for what Australians can expect from LEO internet in Australia.

### **RECOMMENDATIONS**

- That NBN Co continues to work with global Low Earth Orbit (LEO) satellite providers to establish LEO internet services under NBN obligations for remote students including price certainty, network and data sovereignty and options for local support.

### **ISSUE 3 - Telephony Services in Regional, Rural and Remote Areas**

Efforts should continue to increase the mobile phone service coverage in rural and remote areas to fill the void of telephony services. ICPA (Aust) requests that all mobile black spot areas containing a rural school be considered as a priority under future Mobile Black Spot Program rounds or similar future funding programs.

Rural and remote families are incurring large expenses to upgrade their devices and infrastructure to ensure they continue to be compatible with 4G/5G systems. Such changes to telecommunications systems do not have the same financial impact on urban areas, continuing to disadvantage rural and remote Australians.

The Productivity Commission’s Report on the Universal Service Obligation caused great concern among ICPA members that landlines, which geographically isolated families depend on for voice services, will cease to exist and Sky Muster customers moved to VoIP services as their only means of telephony. ICPA (Aust) reiterates that families living outside of city centres, due to the nature of where they live, require two separate forms of communications (i.e. phone/voice and internet/data as separate services and not relying on the same mode of delivery) so that if one fails, the other is still available. VoIP through Sky Muster at present is far from a reliable service and even nbn itself recommends that customers “Consider keeping your copper service active in nbn™ Fixed Wireless and Sky Muster™ satellite areas if you rely on landline phone services in emergency situations”. Satellite services can be affected by weather events and power outages. The emergence of LEOSat technology with its lower latency has the potential for an improved experience for voices services over VoIP, however it is still a satellite service that succumbs to the same reliability issues.

It is critical that telephone service repair times are kept to a minimum to ensure students’ learning can continue. ICPA (Aust) requests a priority installation and repair service be in place for families educating



their children via distance education due to geographic isolation. Fault reporting and repairs need to be prioritised (both internet and phone) for rural and remote students as their schooling is dependent on these services being available.

Continued provision and maintenance of adequate and reliable telephony services in regional, rural and remote areas is critical. 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. Until such time as viable alternatives that are efficient, reliable during all Australian weather conditions with appropriate back up power supply are made available in these areas, landlines need to be maintained and upgraded as required. ICPA (Aust) and our members have welcomed the assurance from the Commonwealth Government that landlines in rural and remote areas will remain in service until such time as another form of voice service that meets the needs of those living in geographic isolation is widely available.

#### **RECOMMENDATION**

- Increase mobile coverage in rural and remote areas.
- Provide some form of funding/rebate to rural and remote people having to upgrade devices and infrastructure to access education.
- That the USG remain on landline telephony services for those living outside of mobile coverage areas and that these landline services continue to be maintained and upgraded as necessary until such time as a dependable, affordable and reliable alternative is available.
- That phone or internet services required for rural and remote students to undertake their education experiencing outages and faults be attended to as a matter of urgency.
- NBN LOCAL and the Telstra Regional Advisory Network need to be operating at a level that can ease some of the pressure raised by groups such as the Regional Tech Hub, Better Internet for Rural Regional and Remote Australia and the Isolated Children's Parents' Association.

**ISSUE 4 – Families have access to communication services commensurate to their needs, including two sources of communication (i.e. voice and data) and comparable to those provided in urban areas.**

The need for two communication services is imperative in rural, regional and remote locations due to the vast distances and isolation our members face. 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 education and business for these families as well as being a safety issue.

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) welcomed the continued funding of the Regional Tech Hub and recommends that the hub receives on going funding and support, including meeting clearly established goals and targets, to ensure regional Australians can get connected to services that meet their needs, learn how to stay connected and use their connections. The Hub should assist with the landline and data needs of rural and remote users. NBN LOCAL and the Telstra Regional Advisory Network are great incentives and should be operating at a level that can ease some of the pressure raised by groups such as the Regional Tech Hub, Better Internet for Rural Regional and Remote Australia and the Isolated Children's Parents' Association.

#### **RECOMMENDATION**

- That families living in rural, regional and remote Australia have two independent sources of communications available to them.
- Ongoing funding and support for the Regional Tech Hub to ensure regional Australians can get connected and stay connected to services that meet their needs.

#### **ISSUE 5 – An action plan should the switch from 3G to 4G not deliver 'the equivalent or better coverage.**

As the changeover from 3G coverage to 4G eventuates, assurance is needed that the new coverage is equal to or better than the existing service.

ICPA (Aust) members have raised a number of concerns including reduced voice coverage in regions that previously had strong coverage and increased call drop out. In some areas, contacting the emergency services has been problematic.

Telstra continues to convey that where areas currently have a 3G signal, showing on their coverage maps, they are committed to providing a 4G network prior to the 3G shutdown. However, a number of ICPA (Aust) members currently only receive fortuitous 3G coverage, that is, their property does not appear on the 3G coverage maps, yet they are able to receive limited 3G coverage. Members have been advised that if they are not on the Telstra coverage map there is no guarantee that they will have access to the 4G network in the same way they have had a 3G service.

For some members, the availability of 3G mobile coverage gave them suitable voice call access which has resulted in the cancellation of their copper or High-Capacity Radio Concentrator (HCRC) landline services, especially in situations where the reliability and maintenance of the landline service was problematic. Some of these families are only now realising that their 3G coverage was fortuitous and as a result when the 3G shutdown occurs these people could be facing the reality of a reduced voice service or no voice call service other than relying solely on satellite internet connections, with the unlikelihood of reconnecting their landline due to aging infrastructure.



### **RECOMMENDATION**

- That there will be a guaranteed action plan, including an appropriate timeline, should the switch from 3G to 4G not deliver the 'equivalent or better coverage' rollout proposed for families who have students relying on the service for education, care and safety.