Isolated Children's Parents' Association of Australia Inc.

"Access to Education"



Submission

to the

Productivity Commission's

Telecommunications

Universal Service Obligation Public Inquiry

from the

Federal Council

of the

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

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Contact:

(Mrs) Jane Morton
Federal Secretary
ICPA (Aust)
505 Ryeford-Pratten Road, MS 422
CLIFTON QLD 4361

FedSecretary@icpa.com.au Phone: (07) 4695 8513 **Contact:**

(Mrs) Wendy Hick
Federal President
ICPA (Aust)
Thorntonia Station
CAMOOWEAL QLD 4828
FedPresident@icpa.com.au

Discos of 4005 2266

Phone: 07 4995 3266

The Isolated Children's Parents' Association of Australia, ICPA (Aust), welcomes the opportunity to contribute to the *Productivity Commission Issues Paper on the Telecommunications Universal Service Obligation* with recommendations that will ensure the improvement of access to an equitable education for rural and remote students.

ICPA (Aust) is a voluntary, apolitical parent body dedicated to ensuring all geographically isolated students have equity of access to a continuing and appropriate education. This encompasses the education of children 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, live great distances from their peers and frequently must live away from home to complete their secondary education.

Access, reliability, and affordability of service are the most pressing communication issues for our members. Access to a reliable telephone service is a necessity for all Australians but particularly for the many occupants of Australia who have no mobile coverage. A mandated right to a fixed telephone service and a reliability guarantee is essential for those that reside in rural and remote areas, allowing for the delivery of education, accessing government services and for enabling enterprises to conduct their business. At present, this is covered by the Telecommunications Universal Service Obligation (USO) and Customer Service Guarantee (CSG).

The dependence on reliable telecommunication services increases with geographic isolation. More than 70% of Australia's landmass has no mobile coverage. Coupled with this, inhabitants of rural and remote areas often have no regular face-to-face access to services, and are becoming more reliant on telephone and data to facilitate access to a variety of services for health, education, business and social needs.

The need for a standard telephone service is particularly vital for students who have no reasonable daily access to face to face schooling due to geographic isolation and who therefore study via distance education. Additionally, a quality telecommunications service is a fundamental requirement, necessary to attract and retain young families and professionals to rural and remote communities.

ICPA (Aust) views the USO as absolutely essential, given the reliance on fixed phones across so much of Australia, particularly in remote areas. While ICPA (Aust) welcomes the opportunity to argue for a much improved minimum standard, it is imperative such a standard is legislated. Suggestions that the USO is no longer necessary because of mobile phone availability, advanced technology and the **nbn** ignore the reality of the technological chasm experienced by residents of isolated areas. Together with an aging population, the increased percentage of Australian students living with a disability or impairment and the isolation of living in a rural and remote area only enhances the need for the provision of a guaranteed telecommunications service suitable for their needs.

Some telephone services are provided in isolated areas utilising satellite, namely Telstra's USO-Sat. This is provided as a standard USO service. This satellite service has the ability to operate as a "single hop" system when calling between other USO satellite users. This technology allows calls to be routed directly via the satellite eliminating the need to double hop. This minimises the effect of latency or delay inherent with geostationary based satellite systems. This technology is only possible if all of the users are on the same satellite.

The **nbn** Sky Muster satellite system does not incorporate this technology so all Voice over the Internet Protocol (VoIP) satellite to satellite calls will double hop and will therefore have latency issues. While single hop is not currently a requirement of a compliant USO satellite service, ICPA (Aust) considers that it should be.

Can the NBN be treated as an alternative (wholesale) USO service?

Since the roll out of the **nbn** Sky Muster commercial service (29 April 2016), there have been suggestions that the fixed telephone service may be adequately replaced by Voice over the Internet Protocol (VoIP), meaning telephone communication would be delivered over satellite internet technology.

For many distance education students reliant on satellite technology to access curriculum and interactive web conferencing lessons with classmates and teacher, the VoIP methodology would cause significant latency issues due to double hopping from one student on satellite to another student on satellite. This would mean that the overall experience of a class lesson would be hindered and interactive group lessons like music would not be possible. Students requiring one on one lessons to develop reading skills or those accessing speech pathology services find it impossible to take part when hindered by latency. It is important that the fixed telephone system be available to be the default for voice communication in distance education home schoolrooms.

Given the ubiquitous nature of mobile services, should fixed line services remain the focus of the USO?

Mobile coverage is important, and all reasonable efforts should be made to extend the footprint. However, with current technologies, diverting USO funding to expanding the mobile service would not achieve total coverage in our lifetime.

ICPA welcomed Round One of the Mobile Black Spot Programme which will fund 499 sites for a cost of \$374.05 million, or an average cost of \$749,600.00 per site and looks forward to the announcement of the Round Two sites.

Round One will increase handheld coverage by 68,600 square kilometres. (137.5 square kilometres per site, on average). Given Australia has a surface area of 7.692 million square kilometres, with over 70% outside of coverage area, many inhabitants will remain reliant on fixed line telephone services, including geographically isolated students who require telephone service access in order to participate in distance education lessons.

Problems such as the lack of mains power for mobile tower sites (solar is impractical with existing technologies) and the lack of back-haul opportunities (by which calls are transferred to the main-stream network) make much of isolated Australia even more difficult to connect to the mobile network.

Given emerging market, technological and policy developments, what areas of market failure should be targeted by any new universal services policy?

Telstra have provided a service to many customers by Next G Wireless Local Link (WLL over the mobile network) technology. These customers have been required to sign a waiver of their USO CSG rights as a condition of connection. As a choice of carrier is no longer a requirement of a USO-compliant service, ICPA (Aust) believes that these and any future WLL services should be considered as a USO service.

A guarantee of internet capacity should be targeted by any new USO policy. Data published in 2014 states that the average domestic internet usage in Australia is at about 175GB per month and that was prior to the introduction of Netflix and other movie streaming technology. The reality in the bush is that an internet service provides for education, domestic and business needs. Internet use has been artificially restricted by the available technologies in the past resulting in a Fair Usage Policy (FUP) being applied to services in rural and remote areas that had no choice other than satellite broadband. It was initially the Interim satellite service (ISS) and now the FUP is applied to the Sky Muster service.

It is essential in this ever evolving digital world that bush users are not excluded from the promise that the **nbn** was to deliver. The FUP must be set at a level that reflects the real world of rural education and living, furthermore it needs to be adjusted as time goes on because it can be an unfair constraint on rural and remote consumers when so much data is available to those in urban areas.

There has also been some suggestion that mobile networks could be used to deliver USO services. Many of our members currently remain outside of the mobile footprint and given the vastness of Australia will probably remain so, however there are some that are able to utilise this service for accessing distance education both through mobile and Next G broadband plans. Congestion on Telstra towers, particularly in tourist areas continues to be an issue. Initial installation of mobile towers may have been adequate however with tourists and businesses using more data and smartphone use increasing, the towers are becoming congested. Telstra continue to bring out new innovations for mobile broadband yet these only exacerbate problems in regional areas and are no benefit to those relying on mobile networks as their only form of internet access. Congestion issues need to be addressed and prioritised.

Should telecommunications users in regional and remote locations reasonably expect exactly the same service quality and price (including usage) as those living in cities irrespective of the cost of provision?

ICPA (Aust) has strong and clear views on communication requirements for the non-urban population, which have come about due to the inequalities experienced over the last decade or so in comparison to available metropolitan services. We are aware that delivering services similar to metropolitan areas, to the rural and remote population, is far more expensive and time consuming to deploy. However, particularly with regard to education, the services required to provide equitable access need to be assured. Those living in rural and remote areas cannot be expected to meet the cost of supplying telecommunications. As part of progressing industries such as agriculture and other vital economic activities along with the many communities that exist and support them, adequate, affordable infrastructure must be in place. In addition to this, every Australian child has the right to an education regardless of where they live and in geographically isolated areas they depend even more so on telecommunications to access this education.

What should be the criteria for the inclusion or exclusion of particular telecommunications services, user groups and locations?

Since July 1999 data has been recognised as an essential service within the USO, with all Australians entitled to a 64Kb/s minimum service. However, the specified minimum speed of 64 Kb/s is completely outdated for today's digital technology. For Schools of Distance Education who are increasingly using the internet to deliver classes and content to remote students, the minimum download speed required to effectively participate is 2Mbps download and more than 1Mbps upload. To date, many schools have not considered using VoIP over the Sky Muster satellite for classes, partly because they recognise the issues with the latency, and partly because it is doubtful that any school would have a class where everyone would have Sky Muster internet installed yet. Lesson delivery varies widely across Australia and each state has different ways of implementing their curriculum delivery. This will need to be taken into consideration. Regular reviews to reflect technological changes should be applied.

ICPA (Aust) believes technology has not yet provided an alternative to a USO mandated fixed telephone service for rural, remote and isolated subscribers. Given the current demographic trends in rural, remote and isolated areas, the retail market for relevant services will not deliver appropriate outcomes for consumers unless such retail service providers are required by legislation to do so. ICPA (Aust) does

support the Universal Service Obligation encompassing mobile telephone service and data, but it should not come at the price of endangering the existence of fixed telephone services for those living in rural and remote Australia who have no other alternative for guaranteed telecommunications services.