

Isolated Children's Parents' Association of NSW Inc.



Submission to the
Productivity Commission Draft Report
Telecommunications Universal Service Obligation

Prepared by

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The Isolated Children's Parents' Association of NSW Incorporated (ICPA-NSW) is a volunteer parent group that lobbies for equitable access to education for all geographically isolated students in NSW from pre-school to tertiary. Member families of the Association reside in regional, rural and remote areas of NSW and some parts of Victoria.

ICPA-NSW has prepared this submission on behalf of its 831 members (2016 register).

The provision of effective communications in regional, rural and remote areas is crucial to enable students to access an equitable education. Education and its provision underpin the functioning of rural and remote towns and communities. Access to appropriate education means that families move to, or remain in, these areas with the intention of contributing to the development and prosperity of that community.

In early July 2015, ICPA-NSW invited members of the public to participate in a simple online survey. 100% of respondents live in regional, rural, remote or very remote areas. Over 80% of respondents have experienced communication barriers that have negatively impacted their child's education, demonstrating the importance of expanding communications technology into regional, rural, remote and very remote areas and at the same time ensuring it remains *available, accessible and affordable*.

Background

NBN Rollout

For the majority of ICPA-NSW members, NBN internet is being rolled out in the form of the *Sky Muster* satellite. Some members have access to NBN Fixed Wireless (dependant on their geographic location) and to a much lesser extent a very small number of members who live in rural towns or have relocated to town to educate their children have access to Fixed NBN.

Education

Currently in NSW, there are approximately 270 students using satellite internet to study by distance education. 21 rural schools utilise satellite internet for education. The service is provided by Optus under contract with the NSW Education Department. To date, there are no immediate plans to transfer these students to the NBN *Sky Muster* Satellite. Mobile phone coverage is non-existent in the majority of these locations.

Landline Reliance

ICPA-NSW members live, work and educate their children in isolated areas of NSW that quite often do not have mobile phone service. Families therefore rely heavily on either copper (if nearer to town), or Digital Radio Concentrator Systems (DRCS) or Next G Wireless Link (NGWL) as the only form of voice communication. It should be noted NGWL is not covered under the current USO.

PRODUCTIVITY COMMISSION DRAFT FINDING 6.2

The quality of the broadband service supplied by NBN infrastructure will be superior to the quality of service previously available across all Australian premises.

However, as is the case under the existing telecommunications universal obligation (TUSO), the quality of voice services will vary across technologies.

- Voice services offered to premises in the NBN fixed-line and fixed wireless footprints will be of a high quality and equivalent to the standard offered under the TUSO.
- Voice services offered to premises in the NBN satellite footprint will be of an adequate quality for most purposes, but will fall short of the quality of those offered under the current TUSO in terms of latency and service repair timeframes. Up to 90 000 premises may be solely dependent on nbn's *Sky Muster* satellites for voice calls.
- Whether further government support for some alternative voice service for these premises is warranted is contingent on whether the quality of nbn's services is below the *baseline* that the broader community would regard as acceptable for a universal service.

PRODUCTIVITY COMMISSION - INFORMATION REQUEST 6.1

Participants are invited to provide evidence on the adequacy of NBN's satellite voice services in relation to defining an acceptable baseline for a universal service. Information on practical and cost effective alternatives to NBN's satellite voice services in areas that currently have no mobile coverage, and their relative merits and costs is also sought.

PRODUCTIVITY COMMISSION - DRAFT RECOMMENDATION 3.1

"The Australian Government should phase out the existing telecommunications universal service obligation as soon as practicable."

ICPA-NSW does not believe the Telecommunication USO should be phased out entirely. ICPA-NSW supports a measured approach to addressing the geographic areas that will require a continued guarantee of support to voice services in those areas. Consideration must be given to all users of NBN's *Sky Muster* satellite and also to NBN Fixed wireless due to NBN Fixed wireless having a reliance on electricity.

Based on the experiences of ICPA-NSW members, voice communication in the form of a *standard telephone service* cannot be achieved with the NBN's *Sky Muster* satellite. NBN Satellite Voice over Internet Protocol (VoIP) will be noticeably less functional than the current landlines utilised by ICPA-NSW members (copper, DRCS Radio or NGWL). This view is based on the following recently identified issues, which should also form the basis of any 'baseline' test by the Productivity Commission:

Reliability – As yet there is no firm **publicly available** data on whether the average reliability target of 99.7% for NBN’s *Sky Muster* satellite has been achieved and whilst in most cases members are reporting improved speeds compared to the Interim Satellite Service, daily drop outs continue to have a negative impact, lasting for more than half an hour, up to three or four times a day. Outages are lasting days in a row often for no apparent reason.

Email received 12/1/2017
ICPA-NSW Communications Portfolio

“...It was suggested to me that I should bring our concerns to you regarding our recent upgrade to the NBN network. I have a daughter starting Distance Ed with (withheld for privacy) in 2 weeks and our internet service has been proving to be an issue recently.

We transferred to NBN in December but are finding the service much less reliable than our old service. A recent outage saw us without any service for 5 days.

Although our daughter has a lot of her work in books, she is required to do her research online as well as class discussions and support with her teacher.

I will keep a log on disruptions and how this impacts on our daughter’s education.”

ICPA-NSW Members
Sean & Bel Chipman
Nangunyah Station
Wanaaring NSW 2840

NBN’s *Sky Muster* satellite fair use policy restricts users to monthly data limits. If a user happens to go over their monthly data, they are shaped and slowed to very limited capacity. In situations such as this, the ability to use *Sky Muster* VoIP is even more limited.

Environmental – Low cloud cover, sun spots, heavy rain, dust storms and heavy smoke in a bush fire interfere with coverage and cause the satellite service to drop out, making it less reliable.

Electricity – Regional, rural and remote areas of NSW are supplied electricity by overhead power lines and are very susceptible to power outages. Due to the huge travelling distances involved, the length of time for power crews to locate and fix interruptions can range from one hour to 24 hours - or longer. The NBN Skymuster and Fixed Wireless both require electricity; therefore if there is a power blackout there is no access to VoIP. This leaves premises without access to any form of phone service very vulnerable if the USO is removed. Generally when there is a power outage, it occurs at a time of high risk to customers, eg bushfire, gale force winds, etc, when there could be the greatest need for a reliable phone service.

The average number of minutes that an Essential Energy customer was without power supply during the financial year, measured as System Average Interruption Duration Index (SAIDI) normalised, was **458 minutes** for the Long Rural Feeders.

Essential Energy 2015/2016 Annual Report

Put into context, the reliability of electricity for Long Rural Feeders is 96.8%. Comparatively the reliability of Sky Muster is supposed to be 99.7%. This target simply cannot be achieved due to *Sky Muster's* reliance on electricity.

The above figures are averages only, so it could be argued that some pockets of Western NSW experience a much higher instance of power outages than those reported in the Annual Report:

“Between Wednesday 9th November and Friday 18th November our power failed 4 times for periods lasting longer than an hour each time. One time was for 6 hours. I could still use my standard DRCS telephone for voice calls though. My nearest neighbour is 20kms away on a dirt road. I have no mobile phone service for 100kms so it would be a backward step to rely on *Sky Muster* as my only standard telephone service.”

ICPA-NSW Member, Balranald NSW

High Latency - NBN designed the *Sky Muster* satellite specifically for internet data, not for voice. The ‘double hop’ that will occur when having a voice conversation between two *Sky Muster* satellite users will cause an even greater lag that does not meet voice grade standards currently met on the copper, DRCS or even NGWL landlines.

Emergency - NBN has stated in the *Sky Muster* satellite user guide that the satellite network is not configured to provide voice call access to emergency services – quote - “This service does NOT replace your normal telephone landline and should not be relied upon for emergency calls.”

The removal of the USO would also mean the removal of ‘Priority Assistance.’ If one has an existing life threatening medical condition in a remote area it is critical that a guarantee remains in place that should the standard telephone service fail, it will be repaired within the statutory timeframes.

The current *standard telephone service* Universal Service Obligation stipulates (amongst other things) that Telstra must provide

- the ability to make and receive automated national and international voice grade telephone calls **24 hours per day**
- **24 hour access** to emergency service numbers free of charge

The combined reliability, environmental, electrical, latency and emergency issues for NBN’s *Sky Muster* satellite - as listed above - prove that 24 hour access to satellite VoIP is unachievable and will provide a much less functional service than that which is provided by the current standard telephone service on landlines. **Every premises on NBN’s *Sky Muster* satellite should remain under the USO. NBN Fixed Wireless has capability for quality voice service equivalent to that of the current landlines, however it should be noted that Fixed Wireless is reliant on electricity and therefore has reliability issues.**

The draft report states that “Of the 400 000 premises within the NBN satellite footprint, at least 310 000 premises are estimated to be able to use their mobile phones, thus providing a low-latency alternative to the NBN satellite service.”

This is an equity issue. Those on Fixed NBN will have a reliable VoIP option and reliable mobile phone usage. **All premises within the NBN Satellite footprint - regardless of access to mobile service - should have guaranteed access to an alternative standard telephone service that is supported by a USO.** Consideration must be given to the anomalies associated with all aspects of life working, living and educating children in these areas. One of those considerations must be that in the event of an emergency or natural disaster access to more – not less – voice communication is paramount.

“I’m lucky enough to get mobile phone service on half the farm and in the homestead. In a bushfire, the mobile tower might be out, but the landline could still be working, or vice versa. We need as many forms of communication available to us for survival. It makes no sense to take a service away and expect me to rely solely on the mobile phone only – not out here.”

ICPA-NSW Member, Balranald Branch

ICPA-NSW requests the productivity commission to consider all of the above information when defining an acceptable baseline for a universal service. ICPA-NSW anticipates the NBN *Sky Muster* satellite will not meet the 99.7% reliability target and requests the productivity commission to wait until the reliability data is available in order to form a baseline. It is therefore crucial to have the copper, DRCS and NGWL services remain under a USO for these areas.

ICPA-NSW requests that those premises reliant on NGWL for standard telephone be included in a USO.

“When Telstra rolled out their Next G Wireless Link service for rural and remote Australia about 10 years ago they didn’t consider it met the Universal Service Obligation, which meant customers weren’t covered by the Customer Service Guarantee. This guarantee has fault repair timeframes, with compensation to customers if their phone service isn’t repaired within these timeframes. As things stand now, customers with Next GWL who log a fault aren’t allocated a technician until such time as there are no outstanding repair jobs for regular customers. In some cases this could be weeks or even months.

With upgrades and improvements to the Next GWL over the past 10 years we’d like Telstra to now reconsider covering this service with their Universal Service Obligation.”

ICPA-NSW Members, Louth Branch

PRODUCTIVITY COMMISSION - DRAFT RECOMMENDATION 5.1

The Australian Government should reframe the objective for universal telecommunications services to provide a baseline broadband (including voice) service to all premises in Australia, having regard to its accessibility and affordability, once NBN infrastructure is fully rolled out.

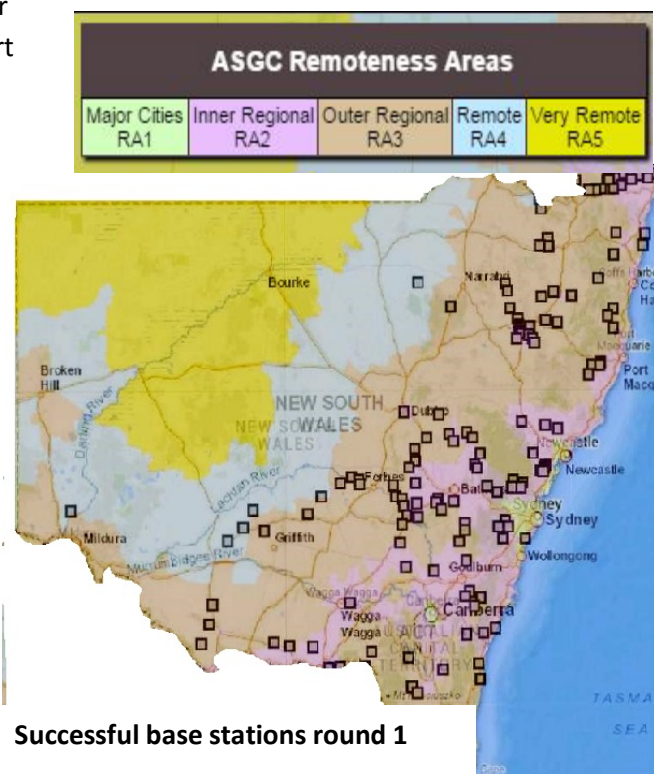
A consistent, minimum standard of data and voice services is crucial. ICPA-NSW believes that consumers in regional, rural and remote areas need a guarantee that service providers will reliably deliver data. **It is imperative that consumers are provided a baseline broadband service that guarantees data delivery so that consumers can confidently select data plans that will deliver and remain in place under the security of a USO.**

PRODUCTIVITY COMMISSION - DRAFT RECOMMENDATION 7.4

Before proceeding to the next round of funding under the Mobile Black Spot Programme, the Australian Government should implement the Australian National Audit Office's recommendations relating to that program. It should also: target the program only to areas where funding is highly likely to yield significant additional coverage; revise its infrastructure-sharing requirements to be consistent with the Australian Competition and Consumer Commission's findings in the ongoing Domestic Mobile Roaming Declaration Inquiry; and prioritise areas for funding based on community input — rather than nominations from Members of Parliament.

The Mobile Black Spot Programme is not delivering to remote areas as the overlay map from round 1 (below) demonstrates.

Despite round two offering further incentives for remote areas, not one remote area of NSW (apart from major transport route in the Balranald and Lachlan Shires) was successful. Remote communities that had a strong lobby were ignored. Of particular concern to ICPA-NSW are the areas that **have rural and remote schools** in them. To use an example, in the event of bushfires and other natural disasters, schools such as Clare Public School in Balranald Shire, are the emergency ‘place of last resort’ and, as the centre of the community, often hold the Royal Flying Doctor medical chest and a defibrillator. Clare Public School is not located within a town, is 155kms north of Balranald and surrounded by farmland in a mobile black spot of approximately 15,000 square kilometres. It’s also a satellite school and would be greatly affected by the satellite VoIP if a USO was removed. To reduce the 15,000 square km mobile black spot between Balranald and Ivanhoe townships with the added benefit to a school and surrounding community should be a high priority.



Telco applications for funding under the mobile black spot programme services tend to be provided in favour of more densely populated areas. However, this does not mitigate the desperate need of those living in isolated and remote areas, for those very same services which are taken for granted in metropolitan areas of NSW.

“Despite a consistent and strong lobby, the Clare School community has missed out on both round one and two, yet in round two recently announced, a tower has been approved in the same Shire 170kms away on a major highway that nobody lobbied for. It is imperative that the needs of the community are considered.”

Spokesperson, Clare Public School P&C Association

ICPA-NSW therefore supports draft recommendation 7.4 to prioritise areas based on community input, to ensure infrastructure is placed where community indicates the need in rural and remote areas. That said, ICPA-NSW has ongoing concerns about the economic viability factors that Telco’s consider when making decisions based on population (and therefore profitability) which determine whether or not they will actually apply for mobile black spot funding for base stations in remote areas.

PRODUCTIVITY COMMISSION - DRAFT FINDING 8.1

The amount of funding required for universal service programs following the full rollout of NBN infrastructure is likely to be smaller than the current funding amount for the telecommunications universal service obligation.

ICPA-NSW believes that any funding reductions and cost savings under a reformed USO should be diverted to the Mobile Black Spot Program to further extend the mobile telecommunications footprint into priority areas identified by local communities. However, there still needs to be a USO for the people reliant on a standard telephone service who do not have access to fixed NBN.

PRODUCTIVITY COMMISSION - OPTIONS FOR CONSIDERATION:

- **Option 1: Change the legislative scope.** The Government could make changes to the *Telecommunications (Consumer Protection and Service Standards) Act 1999* (Cth) to change the scope of the current *standard telephone service* USO, thereby forcing the parties to negotiate a payment adjustment under the TUSOP Agreement. While this may be the most direct route to reform, it may also be seen as a disproportionate exercise of legislative power by the Government, particularly if exercised at such an early stage of the contract's twenty-year term.
- **Option 2: Remove the *standard telephone service* USO in all areas once the NBN rollout is complete.** This option would see the *standard telephone service* USO removed (both the contractual and legislative mechanisms) once NBN infrastructure is deployed. This option acknowledges the role that nbn would play as the statutory infrastructure provider, and would neatly tie the timing of reforms to the NBN rollout.
- **Option 3: Commence a staged wind-back of the *standard telephone service* USO in NBN-connected areas as soon as practicable.** While this option would also tie the timing of reforms to the NBN rollout, it would be more complex to execute as it would see the gradual winding back of the *standard telephone service* USO in NBN-served areas. This rollout progress could then be reflected in a gradual reduction of the payments to Telstra under the TUSOP Agreement.

ICPA-NSW does not see merit in any of these options. ICPA-NSW strongly recommends against removing the USO in areas that have NBN *Sky Muster* Satellite because the satellite is not reliable for VoIP. Those areas still require a guaranteed standard telephone service for copper, DCRS Radio and NGWL. The USO should never be removed from satellite users, but savings made by winding back USO in other areas where NBN fixed to the premises (FTTP) is available can be used to compensate for continuing the USO for *Sky Muster* Users.