We thank the Productivity Commission for the opportunity to make a submission on the Draft Report on the Telecommunications Universal Service Obligation.

We are conscious that the Commission has recognised that those in remote areas, by the very nature of their location, face increased challenges in accessing the variety of telecommunications technology available to most the population (It must be noted that for those not living in a remote urban setting there are further challenges as they have no access to mobile networks and only satellite internet). However, we remain concerned that due to the small percentage of customers affected, the actualities of telecommunications availability will be overridden by misguided perception about the ability of nbn's Skymuster satellite offering, at this time, to deliver accessible, affordable and available options. The inability to achieve full cost recovery for provision of remote area telecommunications discourages both a variety of options becoming available and a competitive corporate environment.

Landlines remain our default communication method for business, personal, educational and health matters. As stated above, many remote residents, including ourselves, have at best minimal to no access to mobile coverage and access only to satellite nbn. When it rains we, invariably, lose internet connectivity. Skymuster appears, based on our personal experience and the anecdotal evidence of those on the same service, to be more sensitive to cloud shading than previous satellite internet offerings. There is evidence that overseas where a similar satellite internet is offered, for the equivalent of ten (10) days per calendar year internet is unavailable/severely degraded due to weather conditions. However, arguably, the Northern Hemisphere location does not experience the equivalent weather prevalent in a Northern Australian wet season and that potentially the accumulated outage could be greater than ten (10)

Our property is in the Gulf of Carpentaria in NW Qld and we are currently in the midst of the annual Wet season. We have three (3) Skymuster connections and all experience outages as soon as rain is on the radar (even without rain directly overhead) ranging from several minutes to eight hours, with outages of over one hour not uncommon. If we did not have a separate, dedicated landline service we would have been unable to make calls necessary to our personal and business needs. Indeed today at 5:30pm, as I type this submission, I am unable to connect to the internet and have been unable since 9am. Anecdotal evidence from the majority of our neighbours and many of our friends across remote Australia on Satellite, echo our own experience and show that, in actuality, the reliability of nbn could not be considered at a higher reliability level than we currently experience under the TUSO (as proposed in Paragraph4, Page 12 of the Draft Report Overview).

We believe it imperative the Commission refrains from making a definitive judgement about the adequacy of nbn's satellite voice services from an acceptable baseline perspective and instead direct the Government to investigate and give appropriate levels of consideration to alternatives to satellite for voice services so that remote customers voice services are not detrimentally affected going forward.

In remote areas the service is not provided, by and large, by the copper network. It is supplied by a Digital Radio Concentrator Service (DRCS) or microwave systems. It is a copper network only from the telephone unit to the transmission tower supplied at each location. This current landline based service is approaching end of life, with limited parts available as well as personnel trained to undertake repairs. Telstra would appear to have become reactive rather than proactive in responsiveness to faults as a means to extend service life.

In response to "Can I use nbn satellite service for VOIP services?", in their Skymuster user guide FAQ section, nbn clearly state:

"Your internet service provider may offer and may need additional equipment. This service does NOT replace your normal telephone landline and should not be relied upon for emergency calls."

While we understand that the Government would wish to see a return on their significant investment in the nbn network, nbn, quite plainly, do not believe satellite capable of providing either an equivalent baseline voice service or an adequate safety net for users and seek to distance themselves from such suggestions. Until, unequivocally, Skymuster offerings become a proven, reliable and consistent substitute for the current landline provision it cannot be considered a credible alternative for a baseline voice service and cannot validate reasoning for the removal of the USO.

In the final paragraph on page 8 of the Draft Report Overview, satellite is a notable omission when considering nbn infrastructure's intrinsic capacity to supply a high-quality telephone service via VOIP and the consequent rendering of a standard telephone service (as provided for under the TUSO) redundant. It could be surmised from this omission that in areas under the satellite footprint the standard telephone service (as provided for under the TUSO) remains the only envisioned option fit for this purpose. Many statements in the Report omit reference to satellite when drawing conclusions based upon observations, research and evidence. This cautious, yet deliberate omission, infers the removal of the TUSO for these customers would not render a standard telephone service (as provided for under the TUSO) redundant and would not be the best response to achieve equitable and/or improved outcomes for nbn satellite customers.

Additionally, the latency, inherent to Satellite, effects fluency and flow of conversation. For the purposes of distance education, the default method by which geographically isolated students undertake their learning, for this very reason, VOIP is currently not suitable. Anecdotal evidence from friends who have attempted it, using Skymuster, indicates delays between offering and hearing responses, particularly when it is a two-way Satellite interaction, severely interrupt the lesson decreasing time spent both on direct learning opportunities and meaningful interaction between students. This is not optimal to maximise successful learning outcomes. Until effects on fluency and flow can be consistently minimised the current landline based telephony remains the best option for geographically isolated families to access the teleconferencing component of their education.

Commercial telecommunications providers with a vested interest in removal of the TUSO and mobile roaming, continue to advocate a link between the removal of the TUSO and, due to freeing of funds, increased investment resulting in a boost in mobile telephone coverage in rural and remote Australia: a proposition the Draft Report seems to give weight and validity. However, those of us living here know the stark reality will, quite likely, not be so. Even *if* mobile phone service providers increased one hundred-fold their investment in mobile towers, given the vast distances in Australia, the majority of the country would remain uncovered.

Whilst most Australians already have access to mobile telephony and data, as clearly shown by the statistics outlined in the Draft Report, this statistic is based upon population and not geography. Despite regional and remote Australia's strong contribution to our national economy our unique circumstances are not actively considered nor assigned appropriate value in decision making due to population paucity. If geography was the determinant of the percentage of coverage the quoted percentage would plummet. It is imperative that an alternate view of availability and accessibility, based on location, be given appropriate weighting to ensure the minority don't lose out due to a universal "one size fits all" approach to future telecommunication content and services along with

development of a new service framework and policy that assumes all will receive comparable service.

Our remote Shire is just over 40 000 km² in size and has mobile access in its main town and in an approximate 15-20km radius around it. A small area adjacent to a minesite is also able to access mobile coverage, though with this mine now closed and winding back to rehabilitation and monitoring, the continuance of the service is not guaranteed. A mobile service will be rolled out in the other community in the Shire this year, a result of a successful application to the Mobile Black Spot Funding Programme and a \$200000 commitment of ratepayer's money by the Local Government authority. Again the area covered will be the immediate town environs and a similar radius. The bulk of the Shire is without mobile coverage and reliant upon landlines and satellite internet for all its telecommunication needs.

Each of the current, and impending, services is offered by one service provider and due to the small population base would most likely not be viewed as a viable option by other providers resulting in an continuing lack of competition and the associated competitive pricing and product offerings. For the majority of our Shire there would remain a non-existent low latency alternative.

The only other telecommunication method available to the public in our Shire is the provision of public telephony services at a roadhouse and hotel in the non-mobile coverage area. With no alternative, when we travel to these areas we must use Payphones to make contact. We also supply a payphone equivalent, accessed by phonecards, for our staff to contact friends and family as no other practical option is readily available.

It could be argued that the declining use of Payphones may be partially as a result of non-maintenance by the service provider. Many times, we have had to use reverse changes to use the payphone as the Payphone is not functioning correctly.

Payphones may be considered not just outdated but on the verge of demise in many areas given alternate methods are readily available but they still form a valued and necessary part of the telecommunications package relied upon in remote areas. The removal of the TUSO would affect those Payphones mentioned above. This needs to understood when determining the final recommendations to Government.

We note that some review participants argued that people's decisions about where to live involved inherent tradeoffs. We concede this and are happy to make tradeoffs – not easily accessing health care, children moving away as they enter teenagerhood for secondary education, no ready access to goods and services, a heavy reliance on expensive freight services for the supply of the most basic goods- but it is unreasonable and, in fact, downright discriminatory to consider a lack of access to a reliable, robust suite of telecommunication services and associated equity in pricing an acceptable tradeoff. Indeed, it is insulting that this derogatory comment was included in the Report.

In regards to affordability, the nbn satellite does offer better value for money than previous satellite offerings. However, it could not be seen to be metro comparable. For our main service, we pay \$70/month for a data only bundle which entitles us to 40GB on peak and 60GB off peak (with off peak being between 1 and 7 am). There are no unlimited data plans nor any that do not consist of peak/off peal offerings with offpeak offering a higher amount of available GB. It is offered with a 25/5mbps maximum.

Frequent speedtesting on a variety of dates/times has shown that whilst at 2am (offpeak) we were to achieve a download speed of 16.9mbps and an upload of 4.3mbps, during reasonable peak times (after 8 am and before 9pm) the best speed achieved was 6.9/4.3mbps – a long way from the advocated maximum. Would VOIP would be able to be utilised successfully at those speeds?

Notwithstanding the complex legislative framework underpinning the TUSO Agreement, that complicates its removal, and its influence upon the final recommendations made by the Commission we believe the Commission must acknowledge, understand and afford appropriate weighting (influence) also to the specific needs of remote Australians when shaping its final report to Government.

In summary, remote Australia requires:

- A proven, reliable replacement to existing services that offers affordability and accessibility to baseline voice services to enable remote customers to adequately meet business, personal, educational and health needs
- Access to public telephony where mobile telephony is not available
- Guarantees that services not be adversely affected by prevailing weather conditions for extended periods
- Access to reasonable data services to support and supplement landline services and offer an
 accessible, reliable backup communication tool
- The Copper Continuity Obligation (CCO) to remain until the above can be proven to be consistently and constantly supplied
- An equivalent, reliable replacement to the currently offered DRCS and microwave systems which are approaching end of life

Until these can be guaranteed the "norm" we believe it essential that TUSO not only be remain but in fact be strengthened.

Firstly, to create greater penalties for not meeting TUSO contracts. Our traditional Wet season creates expectations, and actualities, of phone outages more than once/Wet season and often for periods lasting several days. Two recent outages in this Shire were longer than one week. The longest we have experienced, in recent years, is six weeks. One of the reasons Telstra cites as a reason for delay in response is the workplace health and safety of its staff. As stormy and wet conditions do increase risk, this is quite valid - but what about the health and safety of those customers who cannot contact emergency services due to having no landline? They also cite lack of access and availability of equipment/appropriately qualified staff. Again valid, but given this happens every year without fail, Telstra should be proactive in its preparedness. If penalties were stiffer it could be argued that they would become better prepared. The Government also needs to be more vigorous in enforcing the TUSO and associated penalties.

Secondly, it needs to be broadened to include the provision of affordable, accessible, available data regardless of location.

Lastly, the TUSO needs regular independent review and adjustment to meet the emerging and increasing needs of the population as well as the reliance by government, corporate, education and health stakeholders upon technology to deliver core information and services. Continual developments in telecommunication technology also mean that regular review is necessary to

reflect these advancements and subsequent availability and access to all, regardless of location. It is also necessary to afford protection of, and guarantee minimum standards to, those with limited telecommunications options on which to spread risk. Without this, the digital divide will widen and the ability to develop and grow businesses, deliver real-time health and education benefits, acceptable personal interaction thus attracting and retaining residents ensuring regional sustainability and engaging, thriving communities, markedly declines.

In closing, we implore the Productivity Commission to be a voice for rural and remote Australia and espouse the actual rather than realities of telecommunication provision in our regions, exercise caution and insert flexibility into its recommendations to ensure our unique circumstances are not overlooked because we are a minority.

Yours faithfully

Ernie and Kylie Camp