Submission

to the

Rural and Regional Affairs and Transport References Committee Inquiry into The Shutdown of the 3G mobile network

from the

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

May 2024

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The Isolated Children's Parents' Association of Australia, ICPA (Aust), welcomes the opportunity to comment on the Rural and Regional Affairs and Transport References Committee inquiry into the shutdown of the 3G mobile network and telecommunications services accessibility, providing feedback related specifically to communication needs of rural and remote families who often have unique communication needs in order to educate their children.

ICPA (Aust) is a voluntary, apolitical, national parent organisation, which advocates on behalf of our members for equity of access to an appropriate education for all geographically isolated children and students, from early childhood through to tertiary. Most 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, often live great distances from their nearest education institution and from services required to support the education of these students.

ICPA (Aust) advocacy extends to communications needs of rural and remote education and geographically isolated students. Adequate communications underpin the ability for students in rural and remote areas of Australia to access their education programs and resources. The importance of ensuring high quality, reliable and affordable communications services is critical. For these students, communication is key.

Telecommunications are essential to any modern economy, however for far too long people that live, work and are educated in geographically isolated locations have experienced a less than equitable telecommunications access and seeking solutions for this has been a core part of ICPA (Aust) advocacy for many years.

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 – that is, anyone who can access 3G now should still be able to access a service after it is closed down. Until this can be guaranteed the 3G shutdown should not proceed.

(c) - the absence of 4G services in rural and regional areas previously covered by 3G

Since the implementation of 4G services members have reported reduced voice coverage in regions that previously had strong coverage. Members have reported constant 'dropouts' mid call and to rectify this have had to manually switch their mobile phone back to 3G to make a call. Concerns have been raised that the 4G footprint is smaller than the 3G footprint and when the 3G service ceases, locations that experienced good coverage may find that they no longer have access to mobile service.

EXAMPLE 1
Member A lives in Dongara WA. On the Brand Highway (the number 1 highway around Australia) between Dongara and Perth calls will drop out up to seven times (that was the worst trip). There used to be only two areas where there was no coverage.

EXAMPLE 2
Member B lives at Walgett. They are reporting that the signal coverage has dropped by at least 10kms. They are driving 10kms less before they lose signal. The car boosters do not seem to be working. He has been travelling on the Walgett – Collarenebri Road and the Walgett – Brewarrina Road.

Telstra has suggested that members report individual cases with location details. However, that lack of coverage and dropouts can be sporadic at times and it is difficult to record exact locations when driving. Often your device may show as having signal when in fact you have already travelled into a non-coverage area, so the delay makes it difficult to pinpoint the location. A guide as to the road can be given but it is questionable whether Telstra has the resources to drive over all the areas.

The problem has escalated with the two systems (3G and 4G) running parallel to each other while Telstra perform the necessary upgrades for the 4G network. Telstra have informed ICPA (Aust) that in order to keep all customers connected, artificial constraints have been put on 4G to limit its reach to ensure customers whose devices can only make voice calls on their 3G network remained connected. At the closure of the 3G network these artificial constraints will be removed. This presents two areas of concern:

1. Without being fully tested, when the 3G network is shutdown what guarantee is there that the 4G network will extend as far as the 3G network?

Telstra is promoting with great confidence that the 4G service will be equivalent to or an improvement on the current 3G experience, but that sentiment is not supported, not the current experience, within the wider community. There is a general feeling of great uncertainty and anxiety as to the coverage that will be available when 3G is shutdown. The consistent reports of loss of service as customers transition between 3G and 4G coverage and the diminishing access to the existing 3G service raises concerns of the coverage area and access to 4G.

2. Fortuitous coverage – In areas that currently only have a 3G signal Telstra are committed to providing 4G coverage before the closure of the 3G network. However, some of our members receive fortuitous 3G coverage, that is, their property does not appear on the 3G coverage maps, yet they are able to receive limited 3G service. 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 as they have had 3G service.

In order to have adequate access to this fortuitous 3G coverage, families who reside in rural and remote Australia need to purchase equipment over and above the standard requirement. An example is the requirement for a Cel-fi booster and/or smart antennas, which now need replacing as services change from 3G to 4G. Without a guarantee of 4G coverage families are reluctant to purchase new, often expensive to purchased and install, equipment only to find out they do not in fact have coverage and the equipment is rendered useless. Alternatively, they may in fact get sufficient 4G coverage, so they do not need such equipment.

Telstra have consistently claimed that the 4G network has greater coverage due to the lower spectrum (4G - 700mhz as compared to 3G – 850mhz). If this is the case, and 4G signal travels further, why are Telstra unable to guarantee coverage to everyone who is currently receiving some form of 3G coverage?

EXAMPLE 3
Member C lives on a property 1.5 hours west of Clermont. The property does not appear on the Telstra 3G coverage map, but the use of an antenna has resulted in receiving fortuitous 3G coverage. A visit from a Telstra technician confirmed that it is very unlikely that they would receive 4G coverage and if they did they would require a really large antenna. The only way to be find out would be to purchase the necessary equipment, install it and then test it. This would be a large expense to only discover it does not work. The family are unable to access mobile coverage, even with a Cel-Fi Go repeater, until approximately 25km from Clermont, that's 95km where they can only rely on UHF radio communication.

For some members, the availability of 3G mobile coverage has resulted in the cancellation of the landline copper or High Capacity Radio Concentrator (HCRC) services, especially in situations where the reliability and maintenance of the landline service was problematic. However, some of these families are now realising that their 3G coverage was only fortuitous and as a result when the 3G shutdown occurs they may have no voice service other than relying solely on satellite internet connectivity.

EXAMPLE 4

Member D from Julia Creek was previously with OPTUS but due to service restriction changed their service to Telstra. The station where they are currently employed does not have a functioning landline so rely heavily on 3G service especially when the satellite internet cuts off. This can occur frequently due to weather conditions; too hot there is no internet, too wet there is no internet. Without their mobile service they will be without contact with the outside world for months of the year with the entire station staff having no way to contact emergency services in case of injury or for evacuations.

There's NO known replaceable service for their location once 3G is removed.

Customers on the 3G Next G Wireless Link (NGWL) service may be a customer who only has incidental 3G coverage. If their equipment is migrated to the 4G Fixed Wireless (4GFW) without adequate investigation they may have no service when the 3G shutdown occurs.

For a metropolitan customer, a change of technology such as the move to 4G/5G from 3G may require the replacement of a handset, however, will otherwise have very limited impact on their communication services. For rural and remote customers who require extra equipment to access technologies, which they must fund, access and install themselves, such a change is far more impactful and the provision of assistance, for example, rebates or subsidies, would ensure these customers are not left behind as new technologies are developed and adopted.

(f) the impact of a lack of telecommunications services on the economic and social circumstances of those who live in regional Australia

Mobile telephone has become an important source of communication particularly for reasons of education, health, safety and business outcomes in rural and remote Australia. Socially the mobile telephone has opened people's lives with being able to make direct contact when there is service. The mobile phone has paved a way to breaking down social isolation, but only when it is connected. Government services are increasingly directing customers to utilise Apps on mobile devices to access their services and for identity authentication.

For members who rely on NGWL for landline service, the transition to 4G has been an impost whereby they are required to follow numerous steps to switch, in some cases changing email addresses, then having to install hardware that is delivered via post and have increased cost of landline plans as a result. The impost is so great for some customers that they have chosen to forego the landline altogether, resulting in a loss of secondary back up communications in the case of a potential future emergency. This has a negative effect on an individual's ability to plan and prepare for emergencies and in a remote context, could have potential life-threatening impacts.

Students whose family home is in rural and remote Australia and who are enrolled in Schools of Distance Education, rely heavily on reliable telecommunications to access daily lessons, via both telephone and internet. If the NGWL landline service as a baseline is not available, this puts their health and safety at risk because a landline is the basic service that is meant to be covered by a universal obligation and if consumers choose to reduce that service due to it being too difficult to continue, then this will result in negative educational outcomes.

For those families who have mobile coverage it is highly valued as it affords a backup for the voice and data services of "On Air" lessons when landlines or other internet sources are out. If families with fortuitous 3G coverage lose access through the 3G shutdown these students risk losing touch with their centre School of Distance Education as they will be unable to participate in online lessons with their teachers and classmates when other services are down. Distance Education has moved to a more direct teaching model and if students

are unable to access online 'On Air' lessons, they miss these critical lessons with their teachers. Every student has the right to identify and be a part of their school and these students should be no exception.

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).

Rural and remote families travel vast distances to transport students to school where there is no or little mobile coverage. These roads are generally unsealed and for families travelling on these roads without connectivity is an added risk. Of particular concern for our members is the lack of ability to make an emergency call when needed.

The issues relating to coverage and call drop outs is impacting consumer confidence levels, with speculation that when 3G is switched off, 4G may not have the same effectiveness for voice calls.

Some dropouts are so profound members are reporting that they have to use the landline to call the school for educational purposes. The future of copper and HCRC landlines faces increasing scrutiny, especially with the Review into Better Delivery of Universal Services. The importance of landline retention is clearly highlighted where there is a lack of mobile coverage to ensure rural and remote families have two sources of communication independent of each other, as opposed to voice and data both relying on satellite technologies.

(g) service provisions and coverage

The public messaging narrative from Telcos has assured consumers that equivalency of service will be achieved with 4G. Unfortunately, due to current experiences in the transition phase pre 'switch off' there is widespread scepticism and loss of confidence that this will be the case.

Many rural and remote residents who are on the coverage maps still require extra equipment to be able to adequately access the services. Current 3G compatible devices may not be 4G compatible and need replacement, this can be costly and may not always be reliable anyway.

For those customers who rely on antennas or boosters to extend mobile service they have already purchased equipment to gain 3G coverage and are caught in the commercial crossfires of Telco upgrades, therefore should not be expected to pay again for new equipment to gain 4G coverage. A subsidy or rebate should exist to assist with this purchase.

Even in areas where mobile coverage is available, this is hindered and limited by a number of factors at this time including issues with shrinking coverage, getting less signal in a smaller area than previously, the fact that the 4G footprint is smaller than the 3G footprint and illegal boosters pulling signal from locations.

The use of illegal boosters has been known to drain mobile signal in numerous regional, rural and remote areas with a large awareness campaign and crack down seeing many of these repeaters removed and it was hoped that the congestion issue would improve. 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. With the shutdown of the 4G network customers may look again to purchasing repeaters to improve their 4G signal strength. 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.

Mobile infrastructure in rural and remote areas is facing a new challenge. Numerous travellers are visiting areas for longer stays, impacting the available signal which community residents rely on. 4G has been

promoted as being a superior product to 3G for data use, but as more people have more devices that are connected to the mobile network, and the streaming of services, this congestion is being exacerbated.

Guarantee of repair and service must be maintained, particularly for customers living in rural and remote areas who cannot simply take their phone or internet modem/equipment to the provider's shop to instigate repair or replacement.

The provision and requirement to maintain services needs to be transparent, easily found and understood as well as cover both voice and data connections. Processes must be defined and mandated so that if the companies bound by the safeguards, customer service guarantees, etc. do not comply with the standards set, there are repercussions and penalties for not meeting these targets. This could include automatic compensation for customers (who currently receive a little compensation at times if they complain adamantly and request it, however they have to be aware of the CSG terms in order to raise the issue).

The unique lifestyle and work situations of rural and remote families are often incompatible with the support, maintenance and other services for technology which may be available. The workforce often works from dawn to dusk and availability of a help desk only open during office hours is not compatible. However, if telecommunications provider help desks were accessible 24 hours per day, it would offer more accessible assistance for these families. Additionally, a specific help desk for rural and remote families, staffed with knowledge of the unique and challenging issues faced by rural and remote communities would be beneficial. The dedicated Telstra HCRC '1800 RRadio' facility has been an effective and welcome model which could be enhanced and implemented further for rural and remote customers.

(h) efficacy and capability in disaster situations

Our rural and remote members and their families require certainty that mobile coverage is guaranteed for emergency services, education and functioning of communities. This should include residences, rural properties, along transport routes, in small communities and in locations prone to natural disasters. When emergencies arise such as cyclones, flooding, bush fires and health emergencies, landline phone services often fail, and it is imperative that other means of communication are available, especially for those living in areas that may be many kilometres from their nearest neighbour or next town. Mobile coverage has clear public safety, economic and social benefits for people living, working, educating and being educated and travelling in regional and remote areas.

Power outages occur unexpectedly and frequently in rural and remote areas due to numerous causes including severe weather. These power outages can last for hours or even days. Consequently, it is imperative that the mobile network is still operational. There have been many occasions where natural disasters have resulted in power outages and a battery backup at a mobile tower has failed. There needs to be better monitoring systems to highlight any failing batteries prior to a disaster situation.

(i) adherence to, adequacy of, and opportunity to improve service obligations

In geographically isolated parts of Australia it can prove challenging not only to provide adequate communications services but to also ensure these services are maintained, repaired and reliable. ICPA (Aust) continues to advocate that, where educational delivery hinges on the availability of communications technology, it is essential that priority is given to the installation and maintenance of these services.

ICPA (Aust) is also very concerned that there are situations where telecommunications providers are limiting maintenance and repairs of older, existing technologies despite limited to no alternatives to these technologies in many areas presently. It is imperative that ongoing inspection, scrutiny and enhancements

are made to continuing technology to ensure it is working correctly. While new, emerging or alternative technologies may be being sought and developed, until adequate, equal or better alternatives or upcoming replacement technology become widely available, current services need to be maintained.

Where there is a mobile service there needs to be an improved system for the monitoring of the battery back-up capability. While there is a replacement program it is based on the age of the battery. This is not really an accurate benchmark, and sometimes it is only when there is a disaster that it becomes apparent the battery back-up has failed.

A reliable, affordable, resilient mobile network service will go a long way to providing an alternative means of voice communication (meeting the requirement of two independent forms of delivery) if you are also on voice satellite. However, ICPA (Aust) notes, both services still require power to operate.

(j) any other related matters

Protections

Where the adoption of new technologies requires a change to a customer's hardware, for example, the Next G Wireless Link (NGWL) Service using 3G technology that will be migrated to a 4G solution, customer protections are imperative. Processes need to be identified that offer security and integrity to customers during changeover periods to prevent customers falling prey to scammers.

While ICPA has welcomed the opportunity to work with Telstra to disseminate information to our members regarding the 3G/4G switch, the impacts on what that meant to our members could have been explained in more detail earlier, as it has emerged that not just mobile phone devices are impacted, but other devices also, including the NGWL landlines. The flow of information to the wider community has not been consistent and this is evident with a significant number of people not understanding the closure of the 3G footprint and what this means

The communication methods adopted by Telstra have left consumers confused as to whether the contact may be scam. Clearer and more transparent methods need to be employed.

Availability of hardware

Telstra are acutely aware of how many customers have a NWGL service so would know how much hardware they would require migrating customers to 4GFW. The 3G shutdown was extended to 31st August to give customers time to prepare. Telstra have had five years, yet just recently customers have placed orders to be migrated, only to be informed the equipment is out of stock and on back order. Some have chosen not to transition to 4GFW and have cancelled their landline, so one would think there should be plenty of stock.

CONCLUSION

The 3G shutdown has caused an enormous amount of anxiety for rural and remote families. It is appreciated that there have been upgrades and transitions to technology previously: CDMA to 2G to 3G. However, the reliance and accepted use of mobile technology in todays' society now makes it an essential service for everyday living. The unique challenges and issues faced by rural and remote families in accessing telecommunications still continue and need to be acknowledged and addressed by telecommunication providers.