Telecommunications Universal Service Obligation

Submission by the Australian Communications Consumer Action Network to the Productivity Commission

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About ACCAN

The Australian Communications Consumer Action Network (ACCAN) is the peak body that represents all consumers on communications issues including telecommunications, broadband and emerging new services. ACCAN provides a strong unified voice to industry and government as consumers work towards availability, accessibility and affordability of communications services for all Australians.

Consumers need ACCAN to promote better consumer protection outcomes ensuring speedy responses to complaints and issues. ACCAN aims to empower consumers so that they are well informed and can make good choices about products and services. As a peak body, ACCAN will represent the views of its broad and diverse membership base to policy makers, government and industry to get better outcomes for all communications consumers.

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# Executive Summary

Consumers in Australia should have access to quality and affordable telecommunication services. These services enable consumers to perform essential functions in society today, such as ensuring personal safety and security, ensuring self-progression and development, completing essential tasks, e-commerce, economic livelihood and social interaction.

In ACCAN's approach to the Universal Service Obligation we have utilised the capabilities framework, based on the theoretical framework developed by Nobel Prize winning economist Amaryta Sen.[[1]](#footnote-1) In the twenty first century this approach results in the idea of connectability, the absence of which results in social isolation, loss of functions, reduced economic livelihood and participation in social life, insecurity and potential threats to safety.[[2]](#footnote-2) It is important that we ensure that all consumers can choose to be connected consumers.

The telecommunications market has undergone, and will undergo a significant amount of changes in the next few years. These will significantly improve the range and quality of services that consumers can access. Unfortunately, the market will not meet the needs of all consumers. In particular the areas of affordability, accessibility and guarantees of service are not addressed by the current reforms in the sector. ACCAN believes that intervention is required to ensure that consumers, particularly those with disabilities, limited financial resources, or living in remote and rural geographical locations, can access essential services needed.

## Telecommunications Universal Service Obligation in Australia

ACCAN’s view of the Universal Service Obligation in Australia is:

**Objectives:** The USO should meet the objectives of available, affordable, accessible, empowerment and appropriateness. These revised objectives will ensure that communication services meet the needs of consumers in Australia. (See section 3)

**Options for delivery:** In delivering universal services a number of options from public provision of services to subsidising users of services can and should be used, depending on the failure that is being addressed. (See Section 3)

**Scope:** Essential communication services should be guaranteed.

* **Voice services**: Continued guaranteed access to voice services. Where voice services over the nbn network meet the required standard, voice service can be provided over the network with no additional financial support for retailers. In areas where the nbn network cannot meet this standard the current obligation should ensure access to voice services. (See section 2)
* **Payphones:** Further study should be carried out on the use of payphones and the potential for alternative services to meet and improve the utility delivered by this service. (see section 2)
* **Data services**: Data services should be guaranteed to all Australians. These should meet a minimum standard and ensure access to required amounts of data which adapts to developing needs. (See section 4)
* **Content**: Essential content, such as for education and government services, should be guaranteed. (See section 4)
* A retail provider of last resort obligation for data and voice over nbn should be created to ensure that consumers are not left without a service if a provider no longer operates. (See section 4)
* **Quality:** Service guarantees for connection and fault repairs and reliability standards should apply to services. (See section 5)

**Affordability:** Affordability measures for low income consumers and consumers with disabilities to access a range of telecommunications services and devices should be made available, independent of provider. (See section 6)

**Accessibility:**

* A Disability Telecommunication Service should be established to provide communications information, equipment provision, training and support. (See section 7)
* The National Relay Service should be expanded to include services for Deafblind and multilingual consumers, with all services offered 24 hours per day. (See section 7)

**Funding, costs and implementation**:

* Funding, sourced from industry and Government, should be used and delivered through public provision, subsidising the private sector, and subsidising consumers and carrier licence conditions. (See section 8)
* Implementation should be on a rolling basis as and when the infrastructure becomes available, with everyone guaranteed access by 2021. (See section 8)

# Introduction

ACCAN is a peak member body with a diverse group of members, including community legal centres, disability advocates, indigenous organisations, financial counsellors, regional organisations, farmers’ federations, parents groups, seniors’ organisations and other individual members.[[3]](#footnote-3) ACCAN works in the public interest to promote outcomes that are in communication consumers’ interest.

ACCAN, and its predecessor Consumers Telecommunication Network (CTN), have been keenly interested in the Universal Service Obligation for over 25 years. Consumers have consistently expressed frustration at the lack of services that are included in the USO. This lack of services is amplified in regional and remote areas, with Telecommunications Industry Ombudsman (TIO) data showing 40% of consumer enquiries raise issues with the unavailability or performance limitations of landline and internet services due to the lack of infrastructure.[[4]](#footnote-4) The current telecommunications market has left a number of consumers frustrated by available services and their quality.

Telecommunication services have been and are rapidly evolving. The resulting enhancements to quality of life and economic opportunities from being connected should be available to all consumers. The National Broadband Network, through providing premises and small business access to 25Mbps network, will address some of the issues associated with lack of access to infrastructure. However, concerns in relation to the service guarantees and equivalence of available services still remain.

Furthermore, the barriers to telecommunications services are becoming more complicated and have the potential to increase the divide between those online and those offline. International studies have found that non-users, while decreasing, tend to be more concentrated among vulnerable groups.[[5]](#footnote-5)

Recent ACCAN work has focused on the future of the USO, service guarantees, accessibility and affordability. This submission is based on these research papers, discussions with members and consumers and consultation undertaken at a number of events that ACCAN has recently held.

# Current USO

Guaranteed access to a standard telephone service is and will continue to be important for consumers. Likewise ACCAN believes that payphones may still serve an important function for consumers.

## Standard telephone services

Consumers still rely on the ability to make calls, as indicated by the consistent monthly voice call minutes in the last number of years.[[6]](#footnote-6) The USO obligation to deliver a standard telephone service (STS) is and can be delivered through a number of technologies, including fixed copper phones, high capacity radio concentrator (HCRC), satellite and mobile networks.[[7]](#footnote-7) It was previously estimated that Telstra’s copper network did not connect about 0.25% of premises.[[8]](#footnote-8) Where other technologies can deliver voice standards to the required standard and reliability at a more affordable manner for consumers then these should be used.

Consumers have increasingly expressed frustration about the delivery of voice services to ACCAN. Complaints in relation to landline connection and faults to the Telecommunications Industry Ombudsman (TIO) have increased in the last number of years, with the number of complaints about fully unusable landline services increasing by over 20%, and complaints about delayed landline connections increasing by 23.6% in 2014-2015.[[9]](#footnote-9) In regional areas, which will continue to rely on the STS through the Telstra network, the TIO saw more than a doubling in the number of complaints in the third quarter of 2014-2015 compared to the first quarter of 2011-2012.[[10]](#footnote-10)

The NBN network will provide the infrastructure for voice services in the fixed line footprint, or to about 93% of premises. Following the rollout of the National Broadband Network (NBN) about 7% of premises outside the fixed footprint in Australia will continue to rely on a traditional STS over the Telstra network, as the NBN infrastructure does not guarantee a voice service, nor does it offer the customer a service guarantee. In order for consumers in these geographical areas to access voice services with basic consumer safety nets, it is necessary to have two networks funded (Telstra copper for voice and NBN for data services) to reach them.

In considering if the current USO for voice services could be removed, an alternative that offers the same level of safeguards would need to be ensured. Other technologies such as mobile and fixed wireless may be able to deliver a voice service that meets the standard for some premises outside the fixed footprint, if consumer guarantees are offered and coverage ensured. However nbn satellite technology, which suffers from high latency, will not be able to provide such a service standard. Consumers in these areas will need to have an alternative network available to ensure they can access both voice and data services.

ACCAN supports the continuation of guaranteed access to voice services for all premises. This should ensure a high quality, reliable voice service with enforceable connection and fault repair timeframes for all premises. Where this can be delivered over other technologies, it should be.

## Payphones

ACCAN acknowledges that for the majority of consumers access to payphones is not critical. However, access to payphones appears to still be important for a number of communities and users, and in some cases they still provide a critical service, as demonstrated by 2.4% of calls to Triple Zero originating from a payphone.[[11]](#footnote-11) Further examination of the use of payphones is required to understand why consumers use them. It may be that there is no mobile coverage, so that payphones are the only way to make calls, such as in 10% of remote Indigenous communities.[[12]](#footnote-12) It may also be that a number of consumers do not use mobile services and need access to a payphone to make calls when outside the house. This may be particularly true for older Australians who are significantly more likely to have a fixed phone and no mobile; namely 25% of 65+ aged group, increasing to 48% in 80+ age group compared to 7% of Australians overall.[[13]](#footnote-13) Other groups, such as migrants making international calls, might need access to payphones as there are limited alternative options.

Studying the types of users, alternative communication methods in the locality and the types of calls that consumers are making on payphones will provide a better insight into the utility that payphones deliver to the community. Following this, it may be possible to ensure this utility is provided to consumers by more appropriate means. In a technology neutral environment, it is important to ensure that consumers do not lose the communication functions that they currently have. There currently exists a process to remove payphones following public consultation. If this process is no longer considered adequate, it should be examined to ensure that payphones can be removed without detriment and if necessary adequate alternatives, such as increased mobile coverage where this meets the function, could be used to provide an equivalent function.[[14]](#footnote-14)

## Policy interaction

There have historically been a number of targeted Government programs and policies which have interacted with the provision of universal services, including the Australian Broadband Guarantee Scheme, Networking the Nation, Telecommunications Action Plan for Remote Indigenous Communities, Digital Regions Initiative, Extended Zones, Regional Backbone Blackspots, Satellite Support Scheme, Internet Assistance Program, Remote Indigenous Public Internet Access, Backing Indigenous Ability and the Community Phone Project.

We would like to draw your attention to these:

* Network reliability framework that ensures that faults over the copper network are repaired within reasonable timeframes.[[15]](#footnote-15)
* 2014 Amendments to Telstra’s carrier licence condition that limit Telstra’s Priority Assistance obligations to networks over which it exercises control.[[16]](#footnote-16) This limits protection for priority consumers that are connecting over a network other than Telstra’s.
* Australian Standards that require monitored medical alarms to provide 36 hours battery backup support.[[17]](#footnote-17) The NBN will not meet this standard to allow monitored medical alarms to be delivered over the network.
* Digital Transformation Office and the Digital First Strategy which aims to move Government services to an online platform.
* National Disability Insurance Scheme which will provide support for people with disabilities.

There are also a number of programs delivered through community, telecommunication providers and not for profit groups that act as a substitute for the USO. These generally try to reach consumers who are not served by the USO and are effective at reaching harder to reach consumers. These include:

* Activ8me Remote Communities’ Telecommunications under the Australian Government’s Remote Australia Strategies Programme.[[18]](#footnote-18) These phones provide remote communities with access to free fixed line calls and access to other calls and data services
* Centre for Appropriate Technology’s 250 community phone in Central and Northern Australia.[[19]](#footnote-19)

A number of organisations are also currently addressing gaps in access, accessibility and affordability for data connections. These include, but are not limited to;

* InfoXchange technology support programs including the Wired project which provides internet connections to social housing, GreenPC which provides low income families with equipment, and an iPads in Aged Care program.[[20]](#footnote-20)
* Smith Family Tech Packs which provide families with equipment, internet connections and digital training for disadvantaged children and their families.[[21]](#footnote-21)
* Central Australian Youth Link Up Service computer rooms which provide access to internet and equipment in remote Indigenous communities.[[22]](#footnote-22)

# Objectives, rationales and options for universal services

ACCAN believes that availability, accessibility and affordability are still relevant; however, we believe that further objectives of empowerment and appropriateness are needed.

## Empowerment and appropriateness

In ensuring that we have connected consumers it is important when addressing market failures that the solutions presented are appropriate to meet consumers’ needs and give them control and choice. For example, Indigenous consumers have specific preferences for services which limit the take up of services that are made available but do not meet these preferences (see box).

Swinburne Home Internet in Remote Indigenous Communities’ project found that consumer preference for pre-paid billing, as well as practical difficulties associated with satellite internet connections, means that households are more likely to go without internet than enter into satellite internet contracts.

How much an individual benefits from access to telecommunications relates to their use of the services. It is assumed that access to NBN will, in turn ensure access to particular kinds of content or applications.[[23]](#footnote-23) This however may not be the case and there may be a case for intervention to ensure that consumers can access content and applications that are needed, such as education and health. “It is likely that these conditions could be satisfied by enabling access to e-education, e-health and e-government. They seem likely to be important for universal digital inclusion and participation in society.”[[24]](#footnote-24)

## Options

A range of options could be utilised depending on the objectives established. Currently, the provision of universal services in Australia is met through subsidising the private sector (through funding for standard telephone services and payphones) and subsidising users of telecommunication services (through the Centrelink Telephone Allowance and the Commonwealth allocation to the delivery of the USO). Carrier licence conditions or regulatory obligations are also used to ensure that affordability measures exist.[[25]](#footnote-25) Each option has its own benefits and weaknesses, but all may be appropriate depending on the objective that it is designed to meet.

ACCAN believes that all of the options could appropriately be considered for delivering different elements of a universal service obligation. Subsidising users could be appropriate to address affordability and accessibility issues. Public provision of services is likely to continue in the medium to long term through the delivery of the NBN. Subsidising the private sector or regulatory / licencing obligations may be appropriate to increase mobile coverage.

# Scope: Communication services

Access to data and voice services are increasingly important for all Australians. The essentiality of communication services today can be seen by what they are used for;

* ***in life threatening situations for personal safety and security*** (8.5 million calls were made to Triple Zero in 2014, 67% of which were made from mobile phones),

Rosie works as a social media manager. She would like to work from home; however, her position requires her to video conference with clients and upload large files and videos that she produces. Her internet connection does not allow her to do this, limiting her ability to work or requiring her to travel long distances each day to get the connection she needs.

* ***for self-progression and personal development*** (56% of Australians reported working or studying from home),
* ***to complete essential tasks, e-commerce and economic livelihood, success and well-being*** (77% of Australians banked and paid bills online, 64% for bought or sold items, 49% accessed government websites), and
* ***for social networking, interaction and communication*** (94% used the internet for emailing, 69% of Australians used the internet for social networking).[[26]](#footnote-26)

Access to services and content is as important as access to infrastructure, which on its own does not ensure that consumers can carry out these functions. Unfortunately market forces on their own are unlikely to deliver the networks and services required to ensure that all consumers have access to these services. ACCAN believes that consumers should have access to voice (see section 2) and data services and content.

## National Broadband Network and policy

The National Broadband Network is a hugely significant network rollout that will change how consumers access broadband services and will ensure personal, societal and economic benefits. Within the next four to five years all premises in Australia will be able to request a service over the nbn network, or an alternative infrastructure provider.[[27]](#footnote-27) However, ACCAN does not believe that it is an alternative (wholesale) USO service. This is because the network cannot deliver voice services to all premises (discussed in section 2), services are not offered equivalently to all Australians and there is currently no guaranteed access into the future.

One area that is not equivalent is access to data levels. Currently, consumers over nbn are using on average 128GB of data a month.[[28]](#footnote-28) This figure has increased significantly since last year and it is expected that fixed data use will grow by 180% between 2014 and 2019, and may continue to increase beyond this date.[[29]](#footnote-29) Satellite services offered over nbn, however, are capped at 150GB of data per month, with most plans offering data divided into peak and off peak hours.[[30]](#footnote-30) It is unlikely that the level of data available to consumers over satellite will increase during its existence. This creates risks that demand for data will in the short to medium term outstrip the supply and result in unequal service access between geographical areas.

Furthermore ACCAN has concerns about the long term service standards that are offered over nbn. The objective for the NBN is set out in the statement of expectations letter, which will provide at least 25Mbps download speeds to all premises.[[31]](#footnote-31) There is no guarantee that the policy objective will not change over time which will reduce the objective or the service will continue to be improved as needs develop, especially those receiving satellite services, which has a lifespan of about 15 years. The nbn will address infrastructure availability for these consumers in the immediate timeframe but there is no certainty that this will continue into the long term.

Video relay allows consumers who are deaf to use their own language, Auslan, A one to one high definition video call required for video relay requires a minimum upload and download speed of 1.5Mbps, a maximum end-to-end latency of 150 milliseconds under peak load, packet loss should be less than 1% and jitter should be less than 30 milliseconds. There are limited data networks that can meet this standard to allow consumers who are deaf communicate in their own language.

## Data service

All consumers should be reasonably able to access data services. Access should not be guaranteed to only certain user groups. Data needs to be defined in terms of minimum technical standards which all services must meet to ensure that consistent services are offered equitably across providers, technology and geographical areas. This definition should be broader than a minimum download speed, as this does not take into consideration what people can do with the connection, which is dependent on other technical features such as upload speeds and latency.

This defined data service should take into consideration the applications that consumers need to use. Applications such as voice and video relay service, particularly important in education and for people with disabilities, are a basic requirement for consumers and need a reliable and high quality service to ensure that they function (see box).[[32]](#footnote-32) Currently School of the Air children, using nbn Sky Muster services, are using voice over alternative methods as it is not possible to have a group chat over the Sky Muster service. Likewise, upload speeds are also extremely important for small businesses, particularly if the connection is being used for multiple core functions in the premises. These functions might include using cloud applications for the functioning of a small business, backing up of data to the cloud, health monitoring, and the constant connection updating of applications for a range of devices connected to the internet.

## Retail service provider obligation

The open access and design of NBN means that there are very few reasons why a consumer would not be able to access a retail provider or voice and/or data service over the NBN. Currently there are a number of providers who are offering these services standalone or bundled. Potentially this may occur because of failure of a company, which may leave consumers vulnerable to not having a service provider, or the needs of the consumer being more complicated to service.

This occurred in 2014 with the failure of the provider One Senior. Consumers of this provider, many of which were vulnerable, were left without services almost immediately and without notice.[[33]](#footnote-33) The responsibility was on these consumers to find a new service provider. Many consumers faced financial and emotional distress, with many also losing their phone number.[[34]](#footnote-34) To counter this potential risk a retail service provider(s) of last resort should be established. Similar to the energy sector, there could be a number of providers that may opt to perform this role.[[35]](#footnote-35) A retail provider of last resort obligation for data and voice services may not be a burden on a provider as they are gaining the service and the revenue through increased customer numbers. Subsequently there is little justification for a subsidy to perform this role.

## Mobility and technology neutrality

Accesses to mobile services are vitally important. Mobile services are important for safety, as indicated by the number of calls to Triple Zero,[[36]](#footnote-36) and mobility is a key factor in connectability. Furthermore mobile services may be preferred to fixed broadband among many low income consumers. 23% of households with incomes of less than $40,000 had mobile only broadband, compared to 9% in households with income over $120,000***.***[[37]](#footnote-37)

The Mobile Black Spot Programme has been very important for consumers; however, there have been limitations in how effective it is in delivering competition and choice, despite this being a characteristic of the program. We are aware of one provider not opening publically funded infrastructure to other service providers. The funding through the Mobile Black Spot Programme and other state and territory programmes has distorted competition and ensured that Telstra remains a monopoly mobile provider in many areas.

Clare Public School is 155km from Balranald and consists of a school only (it is not part of a town). In the event of bushfires and other natural disasters, Clare Public School is the emergency evacuation point and, as the centre of the community, holds the Royal Flying Doctor medical chest and a defibrillator in case of a medical emergency. Unfortunately, Clare Public School has no mobile phone coverage and coverage cuts out about 120kms away from the school if traveling by road from Balranald. As there is also a teacher’s residence at the school and a visiting teacher’s residence, mobile connectivity would enhance access to online services for traveling staff and also for teachers who live on site. By default, students would also benefit from enhanced mobile connectivity.

Further funding should be provided to increase mobile coverage as part of a Universal Service Obligation. Addressing black spot mobile coverage should address the issues that are preventing an increase in mobile coverage, such as a lack of or expensive backhaul. Ideally publically funded infrastructure should be on a basis of open access networks, national roaming regulated, or on the condition that the service is re-sold onto other providers to ensure that these consumers also have choice in retail providers. It should also fund important community areas (see box). Government policy is seeking to ensure that at least three internet service retail providers are available in new developments; this should also be a requirement of mobile coverage expansion.[[38]](#footnote-38)

## Content

Telecommunication services and the NBN are, and will increasingly be, relied on to deliver other services, such as education and government services. This method of delivery is seen as a better method to interact with citizens, compared to other methods such as in person or postal, and produces cost savings to the Government from doing so.[[39]](#footnote-39) To deliver these services the telecommunications network and household setup need to meet a certain standard but this is not always the case. There may be a number of premises for which the telecommunications network is not up to the standard needed to deliver these services. They may not be able to afford to connect to access these services or content, or they may not have the technology (e.g. suitable devices or required software) or plan (e.g. suitable level of data allowance) to complete these online services and tasks.

One suggested approach could be the use of zero rating for Government websites (i.e. data is not charged for using these sites). However, this would need to apply to all plans and providers, including mobile networks to ensure equity, which may present a challenge. Furthermore, not all citizens interact or face difficulties interacting to the same level with e-Government and online services. Targeted programs for those that face greater affordability barriers with interacting may be more beneficial.[[40]](#footnote-40)

The Digital Transformation Office (DTO) and the body delivering the service may be best placed to establish systems to deal with the delivery of these services. They are equipped to play a co-ordinating role, and have a technical understanding of the level of service and equipment and software required. Furthermore, this would require content providers to design services with consumers’ ability to use them in mind. If the delivery of online services requires the use of special equipment (e.g. for consumers with disability) the government agency concerned should provide financial support for the purchase of this equipment. As a further example, the cost of equipment for school age students should be considered and programs to address the affordability of these designed. Some of the fiscal benefits accruing to government could be redistributed to prepare citizens and meet the costs of the equipment or data plans required.

# Service guarantees and reliability

While there are legal consumer guarantees covering the provision of services, there is little case law on how these might work in practice in telecommunications.[[41]](#footnote-41) Without a clearly codified framework, it is difficult for consumers to enforce their rights over this complicated service delivery model. While consumers may have some success asserting their rights at the retail level under contract or the Australian Consumer Law, the wholesale level, where crucial services are delivered, remains largely unprotected. Adequately managing this tension between wholesale and retail performance is where improved consumer protections policy is required.[[42]](#footnote-42)

The current CSG only protects the STS. This is out of step with changes in consumer usage patterns, which are now overwhelmingly towards mobile and broadband based communication. The NBN will significantly address the lack of access to infrastructure, but guaranteed service connection, fault repair and reliability remains an issue.

## The need for wholesale service obligations

Where relevant, obligations for fault rectification, connections and appointment keeping should be placed on the wholesale provider. These obligations should include whole of network performance obligations, as well as remedies for individual consumers.

The *Telecommunications (CPSS) Act* gives the Minister for Communications the power to create service obligations on both wholesale and retail telecommunications service suppliers.[[43]](#footnote-43) Currently the legislation is used to create obligations on retailers, in the form of the CSG. This is not suitable in a context where the wholesale NBN network will be largely responsible for ensuring network reliability.

As the NBN reaches scale, wholesale service standards will be more important as nbn is responsible for the performance of the underlying access network. Existing wholesale obligations do not adequately protect consumers. The Wholesale Broadband Agreement (WBA) is an agreement between nbn and its retail customers (e.g. Telstra, Optus and TPG), and its focus is on network management rather than consumer demand.[[44]](#footnote-44) Creating lines of accountability between the wholesale provider and a consumer is more likely to create a network responsive to consumer needs.

In addition, the WBA does not create universal wholesale network obligations. There are a number of smaller competitor wholesale networks, such as TPG’s ‘fibre-to-the-basement’ (FttB). In some instances these networks are operating in ‘islands’ of limited or no infrastructure competition and are exempt from some existing consumer protections. The practical impact is that the nbn is unlikely to overbuild in these areas. This means consumers are left with no protection under the WBA, and limited protection under existing legislation. Policy needs to address this gap preferably through a universal safety net on telecommunications networks.

## Specific obligations

For an obligation to be sustainable, it should provide for a level of network service which realistically balances consumer need with the technical and resource limits of the network. This is consistent with the underlying considerations within the telecommunications legislation.[[45]](#footnote-45)

The obligations should deliver a baseline level of adequate service to individual consumers. This should include:

a) Customer service standards setting timeframes for:

* Fault rectification,
* New connections,
* Existing connections (where infrastructure is in place), and
* Appointment keeping.

b) Reliability measures consisting of agreed independent performance benchmarks to encourage overall high performance across urban, regional and rural/remote geographies. These need to be targeted to address the severity of impact of unreliable services and include metrics such as: [[46]](#footnote-46)

* number of minutes that a customer is without services in a year,
* number of times a customer’s supply is interrupted per year,
* duration of each interruption, and
* number of momentary interruptions per customer per year.

Using these measures, network reliability can be improved by identifying areas for remediation which are causing significant consumer detriment.

## Remedies and incentives

Given the importance of a reliable communications network to a number of functions in a consumer’s life, there needs to be a transparent streamlined mechanism that both encourages improved performance on the part of network operators and aims to compensate a consumer for loss suffered. A combination of negative and positive incentives is needed to achieve this outcome.

### Customer compensation

At the retail level the ordinary remedies under contract and consumer law should apply. These should be complemented by compensation paid by the retailer to the customer for extended outages and delays.

To ensure the wholesaler is accountable for outages and delays it has caused, a standard setting out a compensation formula would make it liable to reimburse the retailer for these payments. To prevent overlap, a workable delineation between wholesale and retail obligations needs to be developed.[[47]](#footnote-47)

*Practical example:* If a customer is experiencing a fault they should be entitled to a dollar amount from the nbn or relevant wholesaler, delivered via the retail service provider (RSP) for each day the service does not work. Such measures should encourage timely repairs and the amount of compensation should increase the longer the customer is left without a service.

### Wholesale price levels and adequate resourcing of network performance

Customer service standards and published reliability measures need to be considered as part of future wholesale pricing decisions. Access pricing decisions should take into account wholesaler performance against customer service guarantee timeframes, and network reliability performance benchmarks as elements in the long term interests of end users. This approach would introduce a positive incentive for network providers to comply, and have the practical advantage of feeding into existing access pricing mechanisms .This approach also places performance in a market context. It can take into account factors such as the efficient operation and international competitiveness of the network as well as important social goals, such as availability and affordability of access.

This mirrors an approach that has been adopted locally in the energy sector, and internationally in telecommunications.[[48]](#footnote-48) The benefit of this approach is that it creates a positive dialogue between the regulator and the industry about performance standards.

### Penalties for failing to meet set performance benchmarks

As in the current system, it is expected that a wholesaler may face penalties for failing to meet set performance benchmarks. The inclusion of both incentives, in the form of pricing decisions, and disincentives, in the form of penalties, is deliberate in order to allow the regulator to tailor appropriate responses to encourage sound network performance. For example pricing decisions need to be set with a long view to encourage responsible investment practice, while penalties may be appropriate on a yearly basis if a wholesaler falls well below the expected standard.

### Exemptions

Providers should be able to apply for exemptions from penalties in situations such as an extreme weather event. As already outlined, independent oversight should be in place to ensure the network is adequately resourced. The aim of this oversight should be to limit the number and length of exemption claims to those needed to recover from the mass service disruption.

# Affordability

Leading academics define affordability as a consumer’s ability to pay for and use telecommunications without sacrificing expenditure on other essential services and items.[[49]](#footnote-49) Affordability is particularly an issue for those that have low predictability of cost and have less well developed coping mechanisms. Affordability is a known barrier for broadband services. Nationally the rate of households with internet is currently 86%, with access falling to just 66% for households in the lowest income bracket.[[50]](#footnote-50) The ABS found that “For households with children under 15 years, the most common reason given for not accessing the internet was cost (43%)”.[[51]](#footnote-51)

Affordability of telecommunication services is currently addressed in Australia in two ways; through the carrier licence conditions on Telstra that requires it to “offer products and arrangements to low-income customers (the low income package)”[[52]](#footnote-52) and the Commonwealth Telephone Allowance. [[53]](#footnote-53) Telstra’s low income package, worth $163m in 2012-2013 but decreasing, helps consumers through a number of targeted services. This package includes relief for phone line rental, InContact, which supports an estimated 76,000 consumers each year.[[54]](#footnote-54) The Telephone Allowance provides eligible welfare beneficiaries between $27.80 and $41.40 per quarter to assist with connections.

An ACCAN survey found that many low income consumers are struggling to pay their telecommunications costs with 62 per cent of respondents either experiencing difficulty paying, having to cut back or stopping using one or more telecommunications services for financial reasons in the last 12 months. Half of respondents said they had difficulty paying their ongoing phone (50 per cent) and internet (49 per cent) bills.[[55]](#footnote-55) John deRidder estimated that between 2 and 4 million people or up to 1 million households are below the relative poverty line and may struggle to get and/or maintain a connection.[[56]](#footnote-56) This would indicate that the current measures are not supporting all consumers who may be facing affordability barriers. Further work by ACCAN has identified a number of groups, not an exhaustive list, as facing unique barriers to telecommunications affordability are: people facing homelessness; low-income families; people with disability; students; older people; people receiving the lowest government income support payments (Youth Allowance and Newstart Allowance); migrants and asylum seekers; Aboriginal Australians and Torres Strait Islanders; the unemployed; prisoners; and people who live in social housing.[[57]](#footnote-57) Many of these consumers may not qualify for assistance through either of the current measures that address affordability. Affordability is one of the indexes that the Digital Inclusion Index will be providing further data on.[[58]](#footnote-58)

## Affordability for accessibility

While issues of connectivity affordability for consumers with disability are similar to those issues of affordability for other low-income consumers, there is an acknowledged higher cost of living with disability which further exacerbates issues of equipment affordability for consumers with disability.[[59]](#footnote-59) Additionally, levels of employment for consumers with disability are considerably lower than employment levels for the general population. Only 53 per cent of Australians with disability are in employment, and of these only 27 per cent in full-time employment[[60]](#footnote-60). OECD indicates that almost 1 in 2 Australians with disability are living in poverty; this is more than twice the number of people without disability.[[61]](#footnote-61) Affordability measures available through the CTA are not available for many people on Disability Support Pension.[[62]](#footnote-62) The cost of mainstream technology, devices and access to service is unachievable for many people with disability. Deaf or hearing impaired consumers whose first language is Auslan have an increased need for data services to be able to communicate in Auslan, which requires video relay.

## Addressing affordability

ACCAN does not believe the current arrangements adequately address affordability barriers and need to be re-examined. Affordability measures going forward should be retail service provider independent to give consumers choice in their provider. John deRidder has estimated that services available from around $5 per week could meet low income consumers’ needs.[[63]](#footnote-63) This could be achieved in a number of ways. Firstly, Government could provide financial assistance to consumers for services and devices; this could be through a revised CTA. The carrier licence conditions, currently only applicable to Telstra, could be expanded so that all retail service providers are required to offer low-income support and services. Alternatively nbn could provide eligible end users with a coupon or voucher for discounted services to be redeemed from their choice of service providers to allow the end-user to obtain a price discount which the provider could in turn claim from nbn. This could be funded by public funding to nbn.

# Accessibility

Daisy has Usher syndrome and is fully blind and profoundly Deaf and uses Auslan (Australian Sign Language) as her preferred method of communication. She is unable to use a fixed line telephone as she is non-verbal and profoundly Deaf. Her vision impairment also prevents her from using a standard TTY as a fixed line phone alternative. Daisy uses a Braille TTY to make fixed line phone calls. Whilst this represents a work around for not having a telephone, it does not provide equivalent access for her. The braille TTY requires her to read Braille translations of her second language (English) as well as input text in her second language via qwerty typing at a pace sufficient to maintain a real time conversation. This is incredibly difficult, stressful and often results in breakdowns of communication.

An iPhone with a refreshable braille display provides Daisy with greater independence and access to information. She is able to access social media, email and sms communication as well as the National Relay Service IP relay for phone calls. By virtue of this she is locked into a sort of enforced brand dependency with Apple, requiring expensive devices and sufficient data allowance in her plan.

Telecommunication services, particularly data services, are expected to address many barriers faced by Australians with disabilities. The National Disability Strategy states that the NBN is “capable of enabling Australians with disability and their carers to access a range of benefits including e-health services, remote monitoring for assisted living, interactive learning opportunities, employment opportunities, increased connectedness within the community and improved access to communication services”.[[64]](#footnote-64) Such services can come with a hefty price in terms of the cost of equipment and data allowance. While it is anticipated that the roll-out of the National Disability Insurance Scheme (NDIS) will provide access to equipment for those NDIS participants who qualify for NDIS funding packages – estimated to be 464,000 participants – for those people with disability who do not qualify for NDIS funding; people over the age of 65, people with episodic disability and those people with disability who fall outside the eligibility criteria for the NDIS, an updated equipment program will be an essential safety-net.

Ensuring services are accessible is a very important element of the USO. The regulations were amended in 1998 to oblige the USO providerto supply equipment that allows people with a disability to have access to a standard telephone service, with a specific obligation for equipment that allows customers to use the National Relay Service (NRS).[[65]](#footnote-65) The current arrangements create barriers to functionally equivalent access to today’s communications services, with many consumers with disability requiring access to high-speed broadband or mobile phones rather than the standard telephone service as currently defined. Furthermore, many consumers with disability face affordability barriers due to the extent of equipment and services they require to allowing them to communicate. In particular;

* consumers who are Deaf or hearing-impaired and who use video technology as an alternative to or augmentation of voice telephony require guaranteed minimum download and upload speeds,
* Deafblind consumers need access to a range of technologies as well as training and ongoing support in order to access communications networks,
* Consumers with speech impairment require access to appropriate equipment, training and ongoing support in order to be able to benefit from access to communications networks

## Disability Telecommunication Service

A future disability equipment program needs to be flexible to reflect current communications technologies and consumer trends. The current communications landscape requires a move away from the limitations of a one-size-fits-all equipment program towards the provision of equipment which best suits the individual needs of consumers with disability. If a consumer’s assessment indicates that a particular equipment solution is needed to provide them with functionally equivalent access to communications networks, then that equipment should be considered for funding, regardless of the type of equipment - mainstream or specialised.

For example, there is not one specific technology or device that can provide essential access to communications networks for all Deafblind consumers – a range of devices, software and applications which can be used in isolation or in combination need to be available through an updated equipment program.

New and emerging mainstream technologies can provide increased access for some consumers with disability. However, there remain barriers which need to be addressed to ensure that consumers with disability can benefit from these new mainstream products. Issues of product awareness, connection and set-up, training in the use of mainstream equipment and ongoing support need to be available to ensure that consumers with disability who are able to benefit from mainstream solutions can continue to use the equipment as updates and upgrades occur. Without these essential services for consumers with disability there will be an increased risk of equipment abandonment, resulting in further isolation and exclusion.

There is a clear need for greater intervention to ensure that all Australians with disability can access and benefit from our increasingly ubiquitous connected society. The current range of ad-hoc programs and services are not providing the necessary safety net. ACCAN sees this review of the Universal Service Obligation as an opportunity to make significant changes to communications laws, policies and practices to deliver inclusive communications to all Australians. In 2011 ACCAN recommended the development of a national Disability Telecommunications Service (DTS)[[66]](#footnote-66). We envision a DTS as a one-stop agency for communications information, equipment provision, training and support. This would alleviate many of the barriers to accessing communications for those consumers with disability who are unable to receive funding packages from the NDIS.

The DTS would;

* Provide information on mainstream and assistive communications products suitable for different disabilities,
* Provide information about connection set-up, equipment training and on-going support resources for different disabilities,
* Provide a range of mainstream and assistive equipment to assist people with disability to access and benefit from communications – become an independent equipment program, replacing the current Telstra and Optus Disability Equipment Programs. An international example of this is the US Federal Communications Commission’s National Deafblind Equipment Distribution Program[[67]](#footnote-67).

A potential model for the DTS is the NDIS Information, Linkages and Capacity Building (ILC) National Carers Gateway (the Gateway). The Gateway will provide a central place for carers to go for information, support and referral to services and will be the ‘front door' for all existing services, regardless of the system they are provided through. The Gateway will include a national telephone contact center, a website with carer-specific information and a service finder to make it easier for carers to find the information and support they need.

## National Relay Service

While the NRS is a nationwide service legislated by the Commonwealth and managed under Commonwealth contracts, the service is funded from a levy on eligible telecommunications companies.[[68]](#footnote-68) The implicit objective of this legislation is that consumers who are Deaf, hearing-impaired or speech-impaired will have anywhere, anytime access to a service which provides functionally equivalent availability to the standard telephone service available to general consumers.

Currently, all but one of the relay services provides this equivalency of availability. The video relay service is currently only provided on a limited basis, thus excluding Auslan users from functionally equivalent access to a telecommunications service. In order to meet the policy objectives of the Telecommunications (Consumer Protections and Service Standards) Act, the video relay service needs to be provided on a 24 hours, 7 days a week basis.

Over the last several years, since the commencement of the current NRS contracts, there have been a number of service improvements and additional relay services included in the suite of services that the NRS offers, including SMS relay, captioned telephony, two-way internet relay and the NRS mobile app. However, Deaf, hearing-impaired or speech-impaired consumers continue to have inadequate access to Triple Zero ‘000’ emergency services when out and about in the community. The introduction of SMS relay was anticipated to ameliorate this public safety issue, however while it is possible to use SMS to contact 000 through the NRS it is strongly cautioned that this should only be used in conjunction with a voice call to 000. Not only is this a significant safety concern for consumers with disability but it is also a significant safety concern for the whole community.

Furthermore, the current NRS protections are limited to consumers who are Deaf, hearing-impaired or speech-impaired. Consumers with additional or multiple disabilities are not specifically protected under the NRS legislation. In order to guarantee access to communications networks for all Australians with disability there needs to be an expansion of the NRS remit to include services for culturally and linguistically diverse consumers with disability, Deafblind consumers, and consumers with intellectual impairments. Australia is a multicultural country, with many Australians speaking English as a second language, or not speaking English at all. As the population ages, so too will the population of people from a non-English-speaking background, and as they age, they may have more difficulty with English than they did previously[[69]](#footnote-69). More than one million Australians with disability are from non-English-speaking backgrounds[[70]](#footnote-70), and more than 25% of people with low English proficiency have a core activity restriction, around double that of the rest of the population[[71]](#footnote-71). Yet NRS calls can only be relayed in English[[72]](#footnote-72) and cannot be used in conjunction with the Translating and Interpreting Service (TIS) except in very rare circumstances[[73]](#footnote-73).

The NRS needs to continue as the communications solution which provides functionally equivalent access for consumers with disability however ACCAN recommends that the NRS objectives be amended to include provision to communications networks for other sectors of the disability community, specifically;

* Amend the TCPSS Act (1999)[[74]](#footnote-74) to specifically include Deafblind consumers,
* Include relay services for culturally and linguistically diverse consumers with disability,
* Expand all relay services to 24 hour, 7 day service.

# Funding, costs and implementation

A USO should address market failures and provide a safety net to those who would otherwise not have services. ACCAN believes that a USO should not distort the market, by reducing investment that would otherwise occur or by supporting one provider over others. Furthermore, barriers should be addressed at the appropriate level (address the cause of the problem), by the most appropriate body to deliver the solution. For example, consumers who require additional support with disability equipment or financial support should not be limited in choice of service provider.

## Funding and costs

Funding arrangements should provide certainty for the continuation of the services for consumers. They should also be transparent. Funding from public sources provides the most transparency and equity; however, it is not always certain that it will be continued. The Mobile Black Spot Programme is only guaranteed on a per round basis and is unlikely to continue until such a time when all black spots are addressed.

A range of funding arrangements could be examined depending on the areas of USO that are being addressed. In line with what ACCAN has proposed we are suggesting the following:

1. Guaranteed access to voice services should be available to all premises. This should be funded through the current arrangements and where alternative technologies and networks can provide an equivalent service the funding should be diverted or reduced in line with these.
2. Data services and essential content should be available to all Australians and funded through the public provision of nbn.
3. A retail provider of last resort obligation should be created, however this we do not believe will be a burden to provide and therefore should not carry any costs.
4. Affordability measures for low income consumers to access a range of telecommunication services and devices should be available to consumers, independent of provider. This should be funded through a review of the Communications Telephone Allowance and through additional industry wide measures.
5. Service guarantees and reliability should apply to voice and data services. This should form part of carrier licence obligations and any associated cost born by carriers or by regulated cost calculations.
6. A Disability l Telecommunication Service should be established to provide communications information, equipment provision, training and support. This could be funded under the current levy funding.
7. The National Relay Service should be expanded to include services for Deafblind and multilingual consumers, with all services offered 24x7. This should be funded through the telecommunications industry levy.
8. Re-distribution of savings to government from switching to online service delivery to offset the cost of change to consumers.

The current telecommunications industry levy should continue and be expanded to include the funding of non-commercial nbn services (BCR Review)[[75]](#footnote-75). In examining funding sources it may be useful to examine further beneficiaries of having everyone connected and provide services over the network, such as over the top providers.

## Implementation

ACCAN believes that the current arrangements need to be reviewed. It will take a number of years before a minimum level of communication service can be provided to everyone, particularly given the time required to complete the rollout of nbn. However, implementation can begin now to put these measures in place, with a timeframe for the new obligations to apply as services are available. The obligation should begin to apply as the nbn network is rolled out, with everyone included by 2021.

1. ORGANISATIONAL MEMBERS AS AT JUNE 30, 2016
* 2508+Disconnected
* Aadmi Co
* Able Australia
* Achieve Australia
* Adult Learning Australia
* Australia Institute (The)
* Australian Communication Exchange
* Australian Council of Social Service
* Australian Federation of Deaf Societies
* Australian Federation of Disability Organisations
* Australian Pensioners and Superannuants Federation
* Australian Privacy Foundation
* Australian Regional Business Development Specialists
* Australian Seniors Computer Clubs Association
* Better Hearing Australia
* Better Internet for Rural, Regional & Remote Australia
* Blind Citizens Australia
* Broadband for the Bush Alliance
* Broadband Today Alliance
* CARE Inc
* Central Land Council
* Centre for Appropriate Technology
* Centre for eCommerce & Communications
* CHOICE
* CICADA QLD
* CITIES - Centre for Indigenous Technology Information and Engineering Solutions
* City of Greater Geelong
* Collective of Self Help Groups
* Combined Pensioners & Superannuants Assoc. of Victoria
* Communication Rights Australia
* Communications Law Centre
* Community Broadcasting Association of Australia
* Community Legal Centres NSW
* Consumer Action Law Centre
* Consumer Credit Legal Service WA
* Consumer Utilities Advocacy Centre
* Consumers' Association of South Australia
* Consumers' Federation of Australia
* Copper Development Centre, Australia Ltd
* Council on the Ageing (WA) Inc.
* Council on the Ageing Australia
* Country Women's Association of Australia
* Cyberspace Law and Policy Centre
* Deaf Australia
* Deaf Children Australia
* Deaf NT
* Deaf Society of NSW
* Deafness Forum of Australia
* Desert Knowledge Australia
* Differently Abled People Association Inc.
* Digital Tasmania
* Diversicare
* Electronic Frontiers Australia
* Ethnic Communities Council of WA
* Evidence Technology Holdings Pty Ltd
* Family Drug Support
* Federation of Ethnic Communities Councils of Australia
* Financial Counselling Australia
* Financial Counsellors Association of Queensland
* Financial Rights Legal Centre
* Footscray Community Legal Centre
* Health Consumers of Rural & Remote Australia
* Helplines Australia
* Homelessness Australia Inc.
* IDEAS NSW
* Illawarra Legal Centre Inc
* Inclusive UX Pty Ltd
* Indigenous Consumer Assistance Network Ltd
* Indigenous Remote Communications Association
* Inner Sydney Regional Council for Social Development
* Internet Australia
* IP Neighborhood
* Isolated Children's Parents Association Australia
* Isolated Children's Parents' Association NT
* Isolated Children's Parents' Association of NSW
* Isolated Children’s Parents Association Queensland
* Isolated Children's Parents' Association WA
* itControl
* Kingsford Legal Centre
* Macarthur Legal Centre
* Media Access Australia
* National Association of Community Legal Centres
* National Association of Tenant Organisations
* National Children's and Youth Law Centre
* National Council of Women of Australia
* National Ethnic Disability Alliance
* Northern Rivers Community Legal Centre
* Novita Children's Services
* NSW Farmers Association
* Parawa Agricultural Bureau Inc
* People with Disabilities WA
* People with Disability Australia
* Physical Disability Australia
* Physical Disability Council of NSW
* Queensland Consumers Association
* Queensland Council of Social Service
* Redfern Legal Centre
* Signs Ministries Charitable Trust
* South Australian Financial Counsellors Association
* Swinburne Institute for Social Research
* Tasmanian Deaf Society
* Tasmanians with Disabilities Inc.
* Tenants Queensland Inc.
* Vision Australia
* W.O.W! - Willing Older Workers Incorporated
* Western Australian Deaf Society Inc.
* Westwood Spice
* Women with Disabilities Australia
* Women's Legal Services Aust
* Women's Legal Services NSW
* Workventures
* Youth Affairs Network of Queensland
1. ACCAN Connected Consumer Policy Position, June 2016. <http://accan.org.au/The%20Connected%20Consumer.pdf> [↑](#footnote-ref-1)
2. Garnham, Nicholas. "Amartya Sen’s capabilities approach to the evaluation of welfare: Its application to communications." *Communication, citizenship and social policy: Rethinking the limits of the welfare state* (1999): 113-124. [↑](#footnote-ref-2)
3. A list of organisational members can be found at Appendix 1. [↑](#footnote-ref-3)
4. The TIO records contact from a consumer about a matter it cannot handle or help with as an ‘enquiry’; TIO, 2015, ‘Submission to the 2015 Regional Telecommunications Review’, p.5 [↑](#footnote-ref-4)
5. Helsper, Ellen J.and Reisdorf, Bianca C.(2016) The emergence of a "digital underclass" in Great Britain and Sweden: changing reasons for digital exclusion. New Media & Society. ISSN 1461-4448 [↑](#footnote-ref-5)
6. P.g 7 of the issues paper [↑](#footnote-ref-6)
7. <https://www.telstra.com.au/consumer-advice/customer-service/universal-service-obligation> [↑](#footnote-ref-7)
8. John deRidder, The future of the USO. Pg.10 <http://deridder.com.au/site/wp-content/uploads/2014/05/ACCAN-USO.pdf> [↑](#footnote-ref-8)
9. Telecommunications Industry Ombudsman Annual Report 2014-2015. <https://annualreport.tio.com.au/complaint-trends/tio-complaint-trends> [↑](#footnote-ref-9)
10. Telecommunications Industry Ombudsman submission to Regional Telecommunications Review, pg. 8. <https://www.communications.gov.au/sites/g/files/net301/f/TIO%20submission%20-%202015%20Regional%20Telecommunications%20Review%20-%20Final.pdf> [↑](#footnote-ref-10)
11. ACMA Communications Report 2014-2015, pg. 90. <http://www.acma.gov.au/theACMA/Library/Corporate-library/Corporate-publications/communications-report-2014-15> [↑](#footnote-ref-11)
12. ACMA, Telecommunications in Remote Indigenous Communities, 2008. <http://www.acma.gov.au/webwr/_assets/main/lib310210/telecommunications_in_rics_2008.pdf> [↑](#footnote-ref-12)
13. ACMA, Older Australians resist cutting the cord. <http://www.acma.gov.au/theACMA/engage-blogs/engage-blogs/Research-snapshots/Older-Australians-resist-cutting-the-cord> [↑](#footnote-ref-13)
14. Telecommunications Universal Service Obligation (Public Consultation on the Location or removal of Payphones) Determination 2011 <https://www.legislation.gov.au/Details/F2011L02707> [↑](#footnote-ref-14)
15. ACMA website. Network Reliability Framework (accessed 18th July 2016) <http://www.acma.gov.au/Industry/Telco/Carriers-and-service-providers/Universal-service-obligation/network-reliability-framework-carriers-service-providers-acma-1> [↑](#footnote-ref-15)
16. Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997 (Amendment No. 2 of 2014). <https://www.legislation.gov.au/Details/F2014L01002/Download> [↑](#footnote-ref-16)
17. Standards Australia AS 4607 – 1999. <http://infostore.saiglobal.com/store/details.aspx?ProductID=316656> [↑](#footnote-ref-17)
18. Activ8me (accessed 18th July). <http://www.activ8me.net.au/about/remote-community-telecommunications> [↑](#footnote-ref-18)
19. Centre for Appropriate Technology (CAT). Community Access Phone (accessed 18th July 2016). <http://www.cat.org.au/the-cat-community-access-phone/> [↑](#footnote-ref-19)
20. InfoXchange affordable internet access programs (accessed 18th July). <https://www.infoxchange.org/au/community-programs/affordable-internet-access> [↑](#footnote-ref-20)
21. Smith Family Tech Pack program (accessed 18th July 2016). <https://www.thesmithfamily.com.au/what-we-do/our-work/at-home/tech-packs> [↑](#footnote-ref-21)
22. CAYLUS computer rooms (accessed 18th July). <http://caylus.org.au/computerrooms/#computer-rooms> [↑](#footnote-ref-22)
23. Gerard Goggin, Realising Universal Communications. <https://accan.org.au/files/Reports/Realising%20Universal%20Communications.pdf> [↑](#footnote-ref-23)
24. John deRidder, The future of the USO, 2015. <http://deridder.com.au/site/wp-content/uploads/2014/05/ACCAN-USO.pdf> [↑](#footnote-ref-24)
25. Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997 (Amendment No. 2 of 2014) [↑](#footnote-ref-25)
26. ACMA Communications Report 2013 – 2014 <http://www.acma.gov.au/theACMA/Library/Corporate-library/Corporate-publications/communications-report>, pages 37 and 55 [↑](#footnote-ref-26)
27. A number of policies and conditions ensure network standards in new developments. Telecommunications in new developments policies provides an overview (accessed 18th July). <https://www.communications.gov.au/policy/policy-listing/telecommunications-new-developments>. Carrier Licence Conditions (Networks supplying Superfast Carriage Services to Residential Customers) Declaration 2014 which ensures fixed networks supplying fast network (25/5Mbps peak information rate) and voice. Furthermore it is expected that infrastructure provider of last resort obligations on nbn will commence from 1 January 2017 [↑](#footnote-ref-27)
28. NBN users download more data per month than national average (accessed 18th July). <http://www.zdnet.com/article/nbn-users-download-more-data-per-month-than-national-average/> [↑](#footnote-ref-28)
29. ACCC, Competition in the Australian telecommunications sector, February 2016. Pg. 10. <https://www.accc.gov.au/system/files/ACCC%20Telecommunications%20reports%202014%E2%80%9315_Div%2011%20and%2012_web_FA.pdf> [↑](#footnote-ref-29)
30. NBN Fair usage policy, pg. 5. <http://www.nbnco.com.au/content/dam/nbnco2/documents/sfaa-wba2-product-catalogue-fair-use-policy_20160407.pdf> [↑](#footnote-ref-30)
31. Statement of expectation letter, April 2014. <http://www.nbnco.com.au/content/dam/nbnco2/documents/soe-shareholder-minister-letter.pdf> [↑](#footnote-ref-31)
32. The frame delay and variation for satellite and fixed wireless services, as currently set out in the nbn Ethernet product description may not allow for these applications to be used reliably over these technologies. [↑](#footnote-ref-32)
33. C|Net, 12th May 2014, OneSeniors Customers disconnected following telco collapse http://www.cnet.com/au/news/oneseniors-customers-disconnected-following-telco-collapse/ [↑](#footnote-ref-33)
34. ABC, 8th May 2014. One seniors collapse sees locals suddenly lose phone services. <http://www.abc.net.au/local/stories/2014/05/08/4000418.htm> [↑](#footnote-ref-34)
35. <http://www.ewon.com.au/index.cfm/suppliers/supplier-responsibilities/retailer-of-last-resort/> [↑](#footnote-ref-35)
36. 8.5 million calls were made to Triple Zero in 2014, 67% of which were made from mobile phones [↑](#footnote-ref-36)
37. ABS, [Household use of information technology, 2012-2013](http://www.abs.gov.au/ausstats/abs%40.nsf/Lookup/8146.0Chapter12012-13). Taken from the Bureau of Communications Research consultation on the funding of non-commercial services. <https://www.communications.gov.au/have-your-say/final-consultation-nbn-non-commercial-services-funding-options> [↑](#footnote-ref-37)
38. Department of Communications and Arts, Carrier licence conditions for new developments <https://www.communications.gov.au/have-your-say/carrier-licence-conditions-telecommunications-new-developments> [↑](#footnote-ref-38)
39. Deloitte estimates that digitising customer transactions in government will result in a net lifetime present value benefit of $20.5 billion (government benefits of $17.9 billion and costs of $6.1 billion and citizen benefits of $8.7 billion. Deloitte Access Economics 2015. Digital government transformation. [↑](#footnote-ref-39)
40. See affordability policy for further information. <http://accan.org.au/our-work/policy/1179-affordable-communications> [↑](#footnote-ref-40)
41. Services are to be provided with due care and skill, be fit for purpose, supplied within a reasonable time (ACL, s.60,61,62) [↑](#footnote-ref-41)
42. Section 65 of the ACL specifically carves out telecommunications and electricity networks from the consumer guarantee provisions if supply is covered by other regulations. [↑](#footnote-ref-42)
43. *Telecommunications (Consumer Protection and Service Standards) Act 1999,* Part 5 Division 3, sections 117D-117E [↑](#footnote-ref-43)
44. *Wholesale Broadband Agreement*, available at: <http://www.nbnco.com.au/sell-nbn-services/supply-agreements/wba2.html> [↑](#footnote-ref-44)
45. *Telecommunications Act 1997*, s3: objects such as:

The long term interests of end users,

The efficiency and international competitiveness of the Australian telecommunications industry, and

The availability of accessible and affordable carriage services that enhance the welfare of Australians. [↑](#footnote-ref-45)
46. These mirror the measures used to monitor network reliability in the energy sector. Further discussion in Houston Kemp, 2014, ‘Electricity Network Service Standards: An Overview’, p.2 [↑](#footnote-ref-46)
47. Broadly the separation would see retailers being responsible for contractual issues (e.g. selling practices, billing, contract cancellation) and wholesalers being responsible for supply issues (e.g. connection to the network, interruptions and quality of supply) [↑](#footnote-ref-47)
48. UKRN, 2015, ‘Regulating for quality of service’; Houston Kemp, 2014, ‘Electricity Network Service Standards: An Overview’ [↑](#footnote-ref-48)
49. Lewin, D; Milne, C. 2010. *Are telecommunications services universally affordable across the EU? An independent assessment for Vodafone*, <http://www.vodafone.com/content/dam/vodafone/about/public_policy/affordability_plum.pdf> [↑](#footnote-ref-49)
50. ABS, Household Use of Information Technology, 2014-2015. 8146.0 (accessed 18th July). [http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/8146.0Main+Features12014-15?OpenDocument](http://www.abs.gov.au/AUSSTATS/abs%40.nsf/Lookup/8146.0Main%2BFeatures12014-15?OpenDocument) [↑](#footnote-ref-50)
51. ABS, Household Use of Information Technology, 2014-2015. 8146.0 (accessed 18th July). [http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/8146.0Main+Features12014-15?OpenDocument](http://www.abs.gov.au/AUSSTATS/abs%40.nsf/Lookup/8146.0Main%2BFeatures12014-15?OpenDocument) [↑](#footnote-ref-51)
52. Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997. <https://www.legislation.gov.au/Details/F2015C00031> [↑](#footnote-ref-52)
53. Department of Human Services, ‘Telephone Allowance’, https://www.humanservices.gov.au/customer/services/centrelink/telephone-allowance [↑](#footnote-ref-53)
54. LIMAC, 2013 report to Minister. <https://www.telstra.com.au/content/dam/tcom/about-us/community-environment/pdf/2013-report-minister.pdf> [↑](#footnote-ref-54)
55. ACCAN, 2016. New data highlights telecommunications exclusion. <http://accan.org.au/election-2016/media/1258-new-data-highlights-telecommunications-exclusion> [↑](#footnote-ref-55)
56. John deRidder, The future of the USO, pg. 19. <http://deridder.com.au/site/wp-content/uploads/2014/05/ACCAN-USO.pdf> [↑](#footnote-ref-56)
57. ACCAN, Affordability Map. June 2016. <https://accan.org.au/Affordability%20Map%20June%202016.pdf> [↑](#footnote-ref-57)
58. Digital Inclusion Index. (accessed 29th July 2016) http://digitalinclusionindex.org.au/dii-project-update/ [↑](#footnote-ref-58)
59. See Department of Social Services Shut Out: The experience of people with disabilities and their families in Australia? <https://www.dss.gov.au/our-responsibilities/disability-and-carers/publications-articles/policy-research/shut-out-the-experience-of-people-with-disabilities-and-their-families-in-australia?HTML> [↑](#footnote-ref-59)
60. See Australian Human Rights Commission (2016) Willing to Work factsheet - Australians with Disability

<https://www.humanrights.gov.au/our-work/disability-rights/publications/willing-work-national-inquiry-employment-discrimination#factsheets> [↑](#footnote-ref-60)
61. OECD (2010) Sickness, Disability and Work: Breaking the Barriers <https://www.oecd.org/australia/46497207.pdf> [↑](#footnote-ref-61)
62. <https://www.dss.gov.au/about-the-department/benefits-payments/telephone-allowance> [↑](#footnote-ref-62)
63. John deRidder, The future of the USO, pg. 19. <http://deridder.com.au/site/wp-content/uploads/2014/05/ACCAN-USO.pdf> [↑](#footnote-ref-63)
64. National Disability Strategy 2010-2020, p.g. 27 <https://www.dss.gov.au/sites/default/files/documents/05_2012/national_disability_strategy_2010_2020.pdf> [↑](#footnote-ref-64)
65. Telecommunications (Equipment for the Disabled) Regulations 1998 and the Telecommunications Act (1997). The National Relay service (NRS) was established as a measure to achieve equivalence to voice telephony for people who are Deaf or hearing-impaired, and later, people who are speech-impaired. [↑](#footnote-ref-65)
66. ACCAN, 2011, Review of Access to Telecommunication Services by People with Disability, Older Australians and People Experiencing Illness. <http://accan.org.au/our-work/submissions/361-review-of-access-to-telecommunication-services-by-people-with-disability-older-australians-and-people-experiencing-illness> [↑](#footnote-ref-66)
67. FCC. National deaf-Blind Equipment Distribution Program. <https://www.fcc.gov/consumers/guides/national-deaf-blind-equipment-distribution-program> [↑](#footnote-ref-67)
68. See footnote 63 above [↑](#footnote-ref-68)
69. <http://en.wikipedia.org/wiki/Second_language_attrition> [↑](#footnote-ref-69)
70. National Ethnic Disability Alliance, ‘Communicating Difference: Understanding Communications Consumers from Non English Speaking Backgrounds (NESB)’, 2010, p24; <http://accan.org.au/files/Reports/Communicating%20Difference%20Report.pdf> [↑](#footnote-ref-70)
71. ‘People From NESB With Disability – Barriers to Accessing Telecommunications’, provided to ACCAN, based on Australian Bureau of Statistics, ‘General Social Survey: Summary Results’, 2006, [http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/9EBEEE90D2746F45CA2572E20013BD17/$File/41590\_2006.pdf](http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/9EBEEE90D2746F45CA2572E20013BD17/%24File/41590_2006.pdf) [↑](#footnote-ref-71)
72. ‘National Relay Service Plan 2010-2011’, p5; <http://www.relayservice.com.au/media/uploads/resources/NRS_Plan__2010-11_2.pdf> [↑](#footnote-ref-72)
73. The segment of the call which is to be relayed must be in English. In theory, therefore, a Speak and Read user could speak directly in a language other than English to the other party, but the other party would have to respond in English so that the relay officer could type their words to the Speak and Read user [↑](#footnote-ref-73)
74. TCPSS Act Division 3 Section 13 (D) <http://www.austlii.edu.au/au/legis/cth/consol_act/tpassa1999620/s13.html> [↑](#footnote-ref-74)
75. <https://www.communications.gov.au/departmental-news/further-consultation-nbn-non-commercial-services> [↑](#footnote-ref-75)