Competition in evolving communications markets

Submission by the Australian Communications Consumer Action Network to the Australian Competition & Consumer Commission

October 2016

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.

Contact

PO Box 639,

Broadway NSW, 2007  
Email: [info@accan.org.au](mailto:info@accan.org.au)  
Phone: (02) 9288 4000  
Fax: (02) 9288 4019  
Contact us through the [National Relay Service](http://relayservice.gov.au/)

Contents

[1. Executive Summary 5](#_Toc465667585)

[1.1. Summary of submission 5](#_Toc465667586)

[1.1.1. Consumer trends and issues 5](#_Toc465667587)

[1.1.2. Emerging services 6](#_Toc465667588)

[1.1.3. Fixed line voice and broadband services 6](#_Toc465667589)

[1.1.4. Mobile voice and broadband services 6](#_Toc465667590)

[1.1.5. Interaction between fixed line and mobile services 6](#_Toc465667591)

[2. Consumer trends and issues 7](#_Toc465667592)

[2.1. Response to question 1: 7](#_Toc465667593)

[2.2. Response to question 2: 8](#_Toc465667594)

[2.3. Response to question 3: 9](#_Toc465667595)

[2.3.1. Meet capacity demand in an affordable manner 9](#_Toc465667596)

[2.3.2. Review of provider and plan 9](#_Toc465667597)

[2.3.3. Early termination fees 9](#_Toc465667598)

[2.3.4. Conveying the difference 11](#_Toc465667599)

[2.3.5. Search Costs and niche products and services 12](#_Toc465667600)

[2.3.6. Service Guarantees 12](#_Toc465667601)

[2.4. Response to question 4: 14](#_Toc465667602)

[2.4.1. Individual use data 14](#_Toc465667603)

[2.4.2. Clarity over offerings 16](#_Toc465667604)

[2.4.3. Comparator websites 16](#_Toc465667605)

[2.4.4. Service performance and speed attributes 18](#_Toc465667606)

[2.4.5. Complaint Statistics 19](#_Toc465667607)

[2.5. Response to question 5: 19](#_Toc465667608)

[2.6. Response to question 6: 21](#_Toc465667609)

[2.6.1. Resolving problems with goods and services 21](#_Toc465667610)

[3. Emerging services 23](#_Toc465667611)

[3.1. Response to question 7: 24](#_Toc465667612)

[3.1.1. Barriers at the network element level 24](#_Toc465667613)

[3.1.2. Default apps by carriers, device manufacturers and operating system owners 24](#_Toc465667614)

[3.1.3. App Store developer guidelines 25](#_Toc465667615)

[3.1.4. Access to all device features 25](#_Toc465667616)

[3.2. Response to question 8: 26](#_Toc465667617)

[3.3. Response to question 9 and 12: 26](#_Toc465667618)

[3.3.1. Exclusive access to content and unmetered data 27](#_Toc465667619)

[3.3.2. Network neutrality 28](#_Toc465667620)

[3.4. Response to question 10: 30](#_Toc465667621)

[3.5. Response to question 11: 30](#_Toc465667622)

[3.6. Response to question 13: 30](#_Toc465667623)

[3.7. Response to question 15: 32](#_Toc465667624)

[3.8. Response to question 16: 32](#_Toc465667625)

[3.9. Response to question 17: 32](#_Toc465667626)

[3.10. Response to question 18: 33](#_Toc465667627)

[3.11. Response to question 19: 33](#_Toc465667628)

[3.12. Response to question 20: 34](#_Toc465667629)

[4. Fixed-line voice and broadband services 36](#_Toc465667630)

[4.1. Response to question 22: 36](#_Toc465667631)

[4.2. Response to question 23: 37](#_Toc465667632)

[4.3. Response to question 29: 37](#_Toc465667633)

[4.4. Response to question 30: 38](#_Toc465667634)

[4.5. Response to question 33 & 34: 38](#_Toc465667635)

[5. Mobile voice and broadband services 40](#_Toc465667636)

[5.1. Response to question 40: 40](#_Toc465667637)

[6. Interaction between fixed line and mobile services 42](#_Toc465667638)

[6.1. Response to question 52: 42](#_Toc465667639)

[6.2. Response to question 54: 42](#_Toc465667640)

[6.3. Response to question 55: 42](#_Toc465667641)

# Executive Summary

Australian Communications Consumer Action Network (ACCAN) would like to thank the Australian Competition and Consumer Commission (ACCC) for the opportunity to submit to its competition in evolving communications markets issues paper.

The evolving communications market is likely to lead to many positive outcomes and benefits for consumers and small businesses. For the most part ACCAN believes that competitive forces and the current regulatory and policy framework will be sufficient to respond to consumer and small business needs.

ACCAN strongly believes that empowered consumers encourage and promote competition. There are some issues which ACCAN believes are hampering competition and may need consideration by the ACCC to ensure that competition is working effectively for consumers.

ACCAN is providing some comments on each section and providing answers to selected questions.

## Summary of submission

### Consumer trends and issues

Consumers’ have a high expectation of and demand for next generation networks. Where a range of services are available, convergence of technologies and services appear to be occurring. ACCAN has identified a number of aspects that are affecting consumers’ transition to next generation networks;

* the ability of the sector to meet the capacity demand in an affordable manner,
* the ability to overcome inertia by some consumers to re-examine their plans,
* the barrier of early termination fees,
* the ability to convey the differences of the evolving technologies and services,
* the high search costs for niche products and services, and
* the guarantees that are available with services and the incentives to increase the reliability, standard and connection and fault repair of networks.

ACCAN has also identified a number of areas where greater information would encourage greater competition and improve consumer decision making;

* Access to own use data,
* Greater clarity on plan offerings,
* Information on speeds and quality attribute
* Publically available complaint statistics

Consumer decision making would be improved with guidelines on comparator websites and bundling. Additionally, clarity on who consumers’ should turn to when trying to resolve complaints with emerging technologies would be of benefit.

### Emerging services

Future OTT services are likely to encourage greater competition and innovation. It is therefore important that any barriers that could reduce this potential are monitored.

As VoIP services are becoming increasingly important for consumers there is merit in having ongoing monitoring to ensure that QoS obligations are being met.

While ACCAN has no evidence of anticompetitive behaviour we consider that the adoption of network neutrality rules should be developed if there is evidence of harm. Furthermore, greater transparency and disclosure over network traffic management protocols may prevent any potential anti-competitive behaviour. ACCAN would be concerned if any mergers were proposed between content providers and RSPs, due to the effect it may have on competition.

### Fixed line voice and broadband services

The geographical difference in the level of competition appears to be continuing over NBN. Switching to services over NBN can be difficult for consumers but made harder if switching provider at this time. The switch over does not appear to be promoting the entry of new RSPs, as much as it could.

The cost of capacity over NBN, CVC pricing, is a limiting factor in the delivery of broadband services. Reduction in the cost of CVC pricing is needed. Furthermore greater visibility is required over individual RSP provisioning to encourage and develop competition on this factor.

Non- NBN networks can cause confusion and frustration for consumers as their choice of providers is limited and the level of service offered is not transparent. This is an area of on-going concern for ACCAN.

### Mobile voice and broadband services

Mobile voice and broadband services are important for consumers. Increased coverage should be encouraged and funding made available on an open access basis. MVNOs have increased choice for consumers, however, which parts of the network they have access to can be a cause of confusion.

ACCAN has concerns about the limited availability of E-SIMs to mobile network providers and the effect it will have on MVNOs ability to compete.

### Interaction between fixed line and mobile services

Consumers, particularly low users, are increasingly switching from fixed line to mobile. Coverage, awareness and uncertainty regarding quality may affect the rate of substitution between fixed line and mobile services.

# Consumer trends and issues

Telecommunications are an essential service for consumers and one which is relied on for many functions, such as keeping in contact with family and friends, e-commerce, personal development and entertainment. The performance of communication services should be judged on how well they allow consumers to perform needed functions. As consumers increasingly rely on communications services the plans and networks need to meet the level of service required at an affordable price.[[1]](#footnote-1) The risk to having consumers not connected is social isolation, reduced economic livelihood, increased and inefficient cost of doing business, un-competitiveness, insecurity and potential threat to safety.[[2]](#footnote-2)

Consumers chose products that can deliver the level of service needed. They are likely to utilise other platforms that offer a greater level of services and/or at a better value for money, where they are available. For numerous consumers, their use of services up to this point has been limited by little or no access to services or poorly performing services.[[3]](#footnote-3) Connection, fault repair, speeds and performance complaints and enquires about lack of available services, particularly for consumers in regional areas, have increased in the last number of years.[[4]](#footnote-4) The ongoing investment in mobile networks and the rollout of the NBN will bring with it increased choice and service offerings to meet consumer needs. However, in order to ensure that the market efficiently delivers and allows consumers to make informed decisions, transparent information about services offerings and easy to find information about available services are needed to reduce search costs for consumers.

## Response to question 1:

How are consumer preferences changing and how is this impacting the communications sector?

Consumers and small businesses increasingly want to take advantage of communication services. Demand and take up of new services, when they are available to consumers, is high.[[5]](#footnote-5) This has put pressure on the communications sector to meet the increasing demand and capacity levels required. Feedback from engagement with consumers and our member organisations is primarily in relation to the availability of networks that will allow them to use communication services. The capacity constraints on satellite services, the lack of mobile coverage and the lack of ADSL ports, or poor performing services are regular complaints. ACCANs Get Connected resource aims to try and address some questions around the lack of available services and potential alternative resources.[[6]](#footnote-6) Other issues raised in a recent survey of small business operators indicate that 96% of respondents have issues with their telecommunications services; the top three specific issues are speed, congestion and outages and almost 65% said that these issues were difficult to resolve.[[7]](#footnote-7) The current telecommunications environment is restricting them in the use of business processes. Where respondents were allowed multiple responses, the top 3 specific desired services that they were unable to use due to issues with their service included;

* Teleconferencing 36%
* Professional Development 36%
* Cloud services 27%

The rollout of the NBN and investment in mobile and other networks, will address some of these issues by making available a high speed network. However, for Retail Services Providers there is going to be increasing pressure to deliver the high speed network that consumers are expecting and have been promised. The varying level of technical capabilities of the NBN networks, varying service guarantees and high cost of capacity are likely to result in consumers not receiving and being able to utilise the range of services that they are expecting.[[8]](#footnote-8) [[9]](#footnote-9)

## Response to question 2:

Does the convergence of fixed-line and mobile markets raise any concerns for consumer outcomes? If so, what are these concerns?

Convergence is happening where both the fixed and mobile markets are available for consumers. There are a number of areas were consumers do not have the ability to use the technology interchangeably. This is particularly true in regional and remote areas that are outside the fixed NBN footprint. For these consumers they may need to maintain a number of services to meet and guarantee the services that they require, particularly in times of storms, emergencies and power outages. This is likely to be relatively expensive for these consumers compared to those who can get all their services with the level of quality needed from one service.

## Response to question 3:

Do you consider that the communications sector will be able to respond to consumer needs in the transition to next generation networks? If so, what market factors will influence this?

### Meet capacity demand in an affordable manner

ACCAN has concerns that the cost to deliver services is going to negatively impact on the sectors ability to respond to consumer needs.[[10]](#footnote-10) As outlined above in the previous answers consumers have a high demand and expectation of high speed services. The funding model of the nbn and the pressure it places on nbn to make a return, particularly the Initial Recovery Cost Account and CVC, is likely to dampen the availability of affordable high capacity reliable services. It also places increasing incentives on nbn and RSPs to sell higher speed tier products in order for consumers to get the required level of service and for the sector to earn a return. Without increased visibility of speeds offered and reduced capacity costs, there is a risk that consumers will not see the full benefit from NBN.[[11]](#footnote-11) This is discussed further in response to question 29.

### Review of provider and plan

Many consumers find communications products quite confusing. As a result, they may simply renew their existing plans when contracts expire without question or review. In addition, only a minority of customers are likely to renew or review their usage during the life of the contract. Some consumers may renew a contract simply because it offers a new phone. The result of this is that many consumers stay with the same provider and on the same plan even if it no longer meets their needs or there are better value plans and providers available to them. There are a number of consumers who are using legacy plans that are no longer available for new consumers as the provider has released new plans which offer more inclusions and better value for money.[[12]](#footnote-12) This tendency of inertia by consumers is likely to inhibit some competition and create difficulties for the sector to transition consumers to the next generation networks.

### Early termination fees

It is difficult for the average consumer to calculate the cost of ending a contract early.  
Currently, the Critical Information Summary provided to the customer when signing up usually contains the maximum early termination fee for the first 12 months of the contract. However, for most carriers, this amount reduces on a monthly basis after 12 months according to a formula. The formulas are not well publicized and are usually incorporated into the standard form contracts. These contracts are very long and not an effective means of conveying information to consumers.[[13]](#footnote-13)

To complicate things further, if customers receive a phone with their plan, they also have to pay the remaining handset instalments (minus any credit that the carrier would have given them if they stayed in the contract). For a consumer to work this out for themselves they would need to manually calculate the amount from the last bill.

There is also the potential that some early termination fees are unfair under the ACL. In its guidance on the ACL, the ACCC states that:

“A term may also be considered unfair if it threatens sanctions over and above those that can be imposed at law. A penalty imposed by a contract should bear a reasonable relationship to the loss likely to be suffered by the business as a result of the breach or early termination, and should not be an arbitrary sum”.[[14]](#footnote-14)

To be clear, ACCAN does not dispute per se the right of the telco to charge a premium for obtaining a phone on contract – these benefits consumers by allowing them to access technology they would otherwise not be able to afford. We also recognize the need for the carrier to have relative certainty about income flow in the short to medium term. However, the confusing about the cost to terminate a contract with a handset may potentially affect consumers’ decision to switch and may be a higher cost than the loss to the provider of the customer leaving.

However, there have been some positive developments in this area. In recent years, companies have begun to give consumers more flexibility to end contracts with competitors, including by subsidizing early termination fees for customers who wish to switch providers.[[15]](#footnote-15) Some providers have also introduced contracts without an early termination fee. For these contracts, customers only need to pay out the handset payment cost.[[16]](#footnote-16)

Additionally, recent research by industry expert John de Ridder shows that these offers, as well as carrier subsidies in general, may not provide consumers with the best balance of value and flexibility.[[17]](#footnote-17) Many consumers believe that contracts provide the best deal if they need a new phone. However this is not always the case.

In transitioning to the NBN, customers may need to break their contracts early because of the legislated Disconnection Date. We believe that many consumers will delay migrating to the NBN until they are out of contract or close to disconnection, in which case some providers might not charge disconnect fees. RSPs who wish to gain market share during this period are likely to experience some difficulties due the complication of getting the end of contract timing right.

### Conveying the difference

There will be a number of fundamental differences in how telecommunications operate going forward. There are some areas where retail providers may not be incentivised to sufficiently inform consumers. This may cause confusion, uncertainty and potentially reduced take up of competitive products that better meet consumer needs. Such areas include;

* Knowledge of how services will work in the case of power outages. For most consumers their service over nbn will not work in a power outage.[[18]](#footnote-18) This message is conveyed to consumers on the booklet they receive from nbn when they are switching over but consumers may not fully realise the implications of this, or how to prepare alternative services to use in these circumstances. There is currently no obligation on RSPs to inform consumers of this difference over most of the technologies. Knowing this information my impact on the choice of services, particularly voice services that may be purchased for emergency situations.
* Understanding which devices (modem /routers and mobile phones) to buy based on the technology footprint for the consumers’ premises. This arises due to the different nbn technologies and the corresponding modem/router devices. These are simply labelled as nbn ready. However, each technology that nbn is using may require different 'nbn ready' devices. Consumers may need to purchase new devices depending on the technology at their premises, but may not be aware of the technology being used. Additionally, ACCAN has heard that some consumers are not benefiting from increased mobile coverage as their mobile device does not work with the next generation coverage available. If consumers purchase devices from technology stores or maintain legacy devices they may not be fully benefitting from the increased investment and next generation technology.
* How voice services will be delivered over IP. For the most part consumers will be using voice over IP (over NBN technologies and LTE - only consumers in the Satellite and Fixed Wireless areas will still have traditional voice services). Providers are calling these voice services different names and it is difficult to understand the level of quality that associated with each service and the different devices that are supported. In relation to NBN VoIP products, it is also unclear if devices and handsets are transferrable between different RSP VoIP services. For example, ACCAN was recently contacted by a consumer utilising a Unicode NBN VoIP handset with alarm pendant. The device works over Telstra nbn VoIP services (it was sold as an NBN ready device), but when the consumer asked iiNet they informed her that they do not support this device.

### Search Costs and niche products and services

Advertisements, reviews and information are widely available for the flagship devices and top service providers. Consumers requiring niche products can face increased search costs in finding products and services that meet their needs. These consumers include those with disabilities; those in geographically isolated locations that require specialised equipment; small businesses; those in areas that do not have access to a range of providers (such as residents in a development served only by small providers that are not on comparison websites or regional consumers with limited RSPs).

For example, ACCAN research has previously found that telco customer facing staff have very limited knowledge of mainstream and assistive products and services suitable for consumers with disability.[[19]](#footnote-19) There is limited availability of mobile plans with only text and data components. This means that consumers with disability who do not use voice are paying for a plan component (voice) which they cannot use and do not want. Consumers with disability need to be able to easily identify these new products and specialised services that match their requirements.

Search cost for these niche products and services may currently be too high and reducing the ability for the market to meet these needs competitively.

### Service Guarantees

A key issue for consumers is the level of service, reliability and connection and fault repair timeframes offered with their service. For example, there is a particular need for service guarantees for small businesses. Research by ACCAN identified that the level of service offered to small businesses are not aligned to their need for higher level of service reliability and support, which was thought to be part of these plans.[[20]](#footnote-20)

While there are legal consumer guarantees over the provision of services, there is little case law on how these might work in practice in telecommunications.[[21]](#footnote-21) 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. ACCAN has previously called for specified guarantees that the wholesale level across all providers.[[22]](#footnote-22) These should be transparent so competition at the network level can occur and consumers can know about the level of service offered over each network. Incentives to encourage greater network performance could be considered by the ACCC in its regulation of the networks.

#### Compensation for service quality issues

During the recent string of Telstra outages, which impacted landline, mobile and internet services for millions of consumers, there was considerable confusion about what remedies might be available. Telstra attempted to address this issue by offering ‘free data’ days.[[23]](#footnote-23) This ad-hoc offer took place on a Sunday and only related to mobile data, which meant many businesses and non-data users were not adequately compensated for the loss suffered.

Some customers feel that they should be able to terminate a contract early if there are repeated service quality issues.[[24]](#footnote-24) ACCAN supports this proposal in principle because it provides consumers with greater choice.

#### ACL guarantees

Repeated service quality issues may be also be a breach of the ACL. The legislated consumer guarantees require that services:[[25]](#footnote-25)

* be provided with due care and skill,
* be fit for a particular purpose or give the results that you and the business had agreed to,
* be delivered within a reasonable time when there is no agreed end date.

There is no obligation for providers to disclose the actual cause of a service outage, so it is difficult to assess whether carriers used due care and skill in providing the service. For example, in the recent Telstra outage in 2016, Telstra claimed that human error was to blame.[[26]](#footnote-26) It is possible that human error would mean that the service was not provided with due care and skill.

ACCAN has played a role in unpacking some of these protections and placing them in a telecommunications context, but could be aided by greater involvement by regulators and tribunals. ACCAN supports proposals that would see guidance notes produced and tribunal decisions published to help consumers better understand their rights in relation to specific services.

## Response to question 4:

What information is or would be beneficial for consumers to help them make informed decisions about which communication services and products would best suit their needs?

Previous studies have shown that adoption of services has slowed due to consumer uncertainty about their broadband needs and usage.[[27]](#footnote-27) Experience with current provider and the similar products on the market makes choosing services difficult for consumers. There is the potential for consumers to rely on factors that they have based previous decisions on to guide new decisions that need to be made, with the potential for some consumers to over rely on familiar or habitual choices.[[28]](#footnote-28) Past information and experiences play a significant role in consumers’ decision making, rather than products and services being chosen on their merits.[[29]](#footnote-29) There are a number of areas which consumers and competition would benefit from greater information:

* Access to information on own historical data, SMS and call usage
* Greater clarity of pricing and plan offerings
* Comparator websites
* Information of speeds and other quality attributes
* Complaint statistics

### Individual use data

Providing transparent and accurate information about products and services empowers consumers to make better decisions and improves competition in the market place. In the same way, providing consumers with data about their own use of telecommunications services in an easily accessible format means that they will be able to make purchasing and switching decisions based on how they actually consume products and services. Increasing the availability and use of data about consumers, to consumers, can stimulate competition and innovation, leading to increased choice and better decision-making.

Currently the Government is considering ways to improve individuals’ ability to access their own data to inform consumer choices.[[30]](#footnote-30) If consumers were able to easily access and understand their telecommunications usage and transactional data, they would be able to determine more accurately what inclusions they need in their telecommunications plans. It would also make comparing plans much easier, leading to better functioning of competitive markets, improved consumer decision-making, and the lowering of barriers to switching.[[31]](#footnote-31)

Behavioural economics recognises that consumers have limits on the amount of information they can take in, are affected by presentation, tend to be poor at anticipating the future, care about people and fairness, and are more concerned about losses than they are about gains.[[32]](#footnote-32) To combat biases and improve decisions (and competition) overseas governments have developed ways to harness the growing collection of consumer data and simplify decision-making.

The UK Government’s voluntary midata scheme is the leading example. It allows bank customers to compare current accounts using their own transactional data. To use midata, a consumer downloads their spending data in a .csv file format from their online banking and then uploads it to the ‘Gocompare’ website. The site then uses the data to create an account comparison and an ‘estimated value’ of the amount an individual stands to lose or save by switching accounts or banks.[[33]](#footnote-33) Midata thus demonstrates the potential for similar schemes to be developed in Australia, ideally across multiple service industries including telecommunications, banking, and utilities.[[34]](#footnote-34)

Billmonitor[[35]](#footnote-35) is a tool specifically for telecommunications consumers that stemmed from the midata initiative. Billmonitor compares a consumer’s bills to around three million plans on the UK markets and shortlists the most appropriate plans with the most value. The creators of billmonitor estimate that consumers in the UK waste on average £6 billion per year from being on the wrong mobile phone plans.[[36]](#footnote-36)

ACCAN suggests that the Australian Government and regulators take similar steps to the UK to increase competition in the telecommunications market by facilitating consumer data sharing. For consumers to gain the most benefit from their data it must be easily machine readable and reusable, and should also be easily understood by consumers. It should be in a consistent open format so that it can be uploaded to different comparator sites for analysis.

### Clarity over offerings

ACCAN agrees that plans can still cause confusion for some consumers.[[37]](#footnote-37) There are a number of issues that affect consumer’s ability to evaluate whether a contract is good for them. These include:

* The length of the plan – many services are available on varying lengths; 1, 10, 28, 30, 90, 365 day billing periods or by calendar months. It can be difficult to compare plans that have varying period lengths. The availability of a range of periods can be extremely important for consumer and may meet some consumer’s needs, such as those who use services infrequently or do not have coverage for periods at a time. However, the difficulty in comparing these services on an equivalent basis is likely to impact consumers’ decisions on which service to choose. They may believe that it is the cheapest service available, but when other plans are calculated over the same period it may not be the best choice. For example, a number of providers are switching to 28 day periods. Over a year this adds an additional month of service that consumers need to pay for.[[38]](#footnote-38)
* Various introductory offers, for example bonus data for the first month, or free trials to streaming services. This can be confusing for consumers who think the promotion price is ongoing or who forget to reevaluate once the promotion is over. For example, the first free months to a subscription service.[[39]](#footnote-39)
* The unit cost per GB of data. Some RSPs offer NBN on non-unlimited plans display the cost of the plan per GB, but this is not consistent across the sector. We believe this is a very useful comparison tool for consumers, similar to the unit pricing that was introduced for supermarkets in 2009/10.

### Comparator websites

Comparator websites are playing an increasingly important role in guiding consumer decision making. The telecommunications sector has two main comparator websites serving consumers, WhistleOut/Canstar and Finder.[[40]](#footnote-40)

ACCAN is concerned that the benefits of these services may be undermined if providers fail to act appropriately. For example there may be a number of ‘behind the scenes’ factors that influence how products and services are presented, such as:

* Inducements
* Preferential treatment
* Algorithms
* Sales quotas
* Commercial relationships between comparator websites and telco service providers.

ACCAN has been supportive of and provided feedback on the ACCC guidance to comparator website operators.[[41]](#footnote-41) This guidance was centered on greater transparency around how comparisons were conducted and commercial relationships that may exist.

However, ACCAN remains concerned comparison sites do not adequately disclose the commercial relationships they have with the providers of the products they cover. Poor practice in this area may be picked up by existing consumer protections which prevent misleading and deceptive conduct. However, the arm’s length relationship between comparator websites and the services compared, as well as limited information about how comparisons are conducted creates barriers for adequate enforcement.

Traditionally product comparisons have been the core business of consumer organisations, with standards in place to maintain independence and transparency. However, the current business model for comparator websites is reliant on advertising and commission based selling. This can come into direct conflict with the interests of consumers. To avoid these problems in the energy sector the regulator maintains its own comparator website called ‘Energy Made Easy’.[[42]](#footnote-42)

ACCAN strongly urges the ACCC to be vigilant and strictly enforce the Australian Consumer Law against any person or company that seeks to mislead the public about the quality and affordability of telecommunications services. A successful strategically chosen prosecution will lay the foundation for comparator industry compliance in the future. It will also allow the ACCC to have confidence when issuing infringement notices for less serious contraventions without having to worry about legal challenges.

Making better purchasing decisions can lead to sizable productivity gains across an economy. QUT research found that the economy wide savings from consumers having switched their internet services in the last 5 years is at least $136,471,044 and for mobile phones at least $326,937,600.[[43]](#footnote-43)This could be achieved through directly providing these services or funding consumer organisations which adhere to strict guidelines on independence to provide comparisons.

### Service performance and speed attributes

Telco services and goods, particularly in the move to Next Generation Networks, could be considered as ‘experience goods’ where they need to be experienced to understand their true value. Traditional terms which can be compared, such as price, do not indicate the quality and additional benefit that the service can deliver over previous technologies and networks. This is particularly true where mobile and nbn services offer such things as unimaginable speeds and the greatest level of coverage, which have to be experienced to be valued. Such quality attributes are currently unmeasurable by consumers until after they purchase the product.

If consumers cannot make informed decisions based on measurable quality attributes then it is unlikely to result in competition in these areas. The range of services offered by providers are likely to end up at the same level of quality offered. This may currently be an issue with speeds over NBN. A large number of services that offer the same speed tier are priced at the same level. It is difficult to distinguish the varied provisioning that is being offered by the provider. This creates inefficiencies as both consumers and providers would be better off with competition in quality factors.

Greater information around broadband performance is important for consumers for these reasons:

1. It will help them to compare products in order to choose the service that best suits their needs. Descriptions currently used, such as ‘fast’, or ‘up to’, do not offer the consumer the ability to compare actual performance and match their usage needs in a rational way. Greater information will help inform decision making, especially when considering switching products to obtain improved services.
2. It will help enable fault diagnosis when problems are encountered and help identify whether a fault is systemic to the home, access, or upstream network.
3. To help consumers seek recourse when the service does not meet expected standards and for easier compliance with Australian Consumer Law rights.

Broadband speed claims is an issue that ACCAN members and consumers regularly express frustration about. They can be confusing and misleading, because they often do not match the speeds services can actually achieve in real-world conditions. ACCAN welcomed the ACCC investigation into this area and believes that further guidelines for retail service providers (RSPs) are needed to improve advertising practices. Standardised comparable information on actual predicted performance to assist consumers navigate the market are needed. The proposed Broadband Performance Monitoring and Reporting Program, which aims to test service performance, is needed to support and verify the claims made by RSPs.[[44]](#footnote-44)The term ‘speed’ is used synonymously to describe performance of a service. A number of issues that consumers encounter are often described as ‘speed’ issues, the solution to which is often posed to be faster speeds. This, however, is not reflective of all issues with services encountered. ACCAN asserts that both information on the broadband service, including average speed and peak speed, and the internet service, for example, information related to network peers and connections, needs to be presented to consumers. Information on any prioritisation over the network that occurs should also be presented to consumers.

### Complaint Statistics

The release of complaints by provider would be very useful for consumers to understand the level of customer service. The TIO and Communication Alliance releases a complaints in context report, however, this is only for complaints that go to the TIO for selected RSPs. These are not representative of all consumer complaints. Consumers who contact ACCAN regularly ask for advice on which is the best RSP and who has the happiest customers. Consumers would welcome information on this element of the service. Real time Net Promoter Score (NPS) statistics, like those released by Macquarie Telecommunications or regular complaints in context, would help to drive competition in this area and allow consumers to choose providers based on how they value this element of the service.[[45]](#footnote-45) Small providers regularly tell ACCAN that this is the element that they see as their unique feature in the market; however, they may be limited in the number of consumers choosing their services over lack of clarity on this issue.

## Response to question 5:

Are consumers currently able to accurately compare bundle offers? Please provide information about how this comparison currently occurs, and any changes you consider are needed.

Bundles offered by telecommunications providers are not adequately transparent about inclusions and pricing, which means that comparison of different bundles, becomes more difficult. In addition bundles often lead to consumer ‘lock-in’, which increases switching costs and is anti-competitive.

The use of bundling in telecommunications influences consumer decision-making. Complex technology and pricing makes the cost of searching for the right bundle higher, as consumers try to compare bundles offered by different providers. Research has found that comparing alternative bundles is complicated and made even more difficult by “deliberate randomised pricing strategies designed to maximise supplier products”.[[46]](#footnote-46) In addition, the perceived value to a consumer may increase when products are bundled as bundling reduces the amount of time that consumer needs to spend finding information on separate, stand-alone products. The market is less efficient when consumers choose bundles for convenience rather than value, so it is important that product offerings are more transparent and tools that make comparison easier are made available. The OECD has suggested that regulators are best placed to develop these comparison tools.

Another anti-competitive facet of bundling services is that choice can be restricted by bundles that include services that a consumer does not need or value. An example of this is the prevalence of broadband bundles being offered with a fixed telephony service. Tying broadband to fixed telephony raises the cost of switching and is anti-competitive.[[47]](#footnote-47) This issue is of increasing importance as less and less Australians are requiring or using a fixed phone service, and as OTT alternatives become more reliable and available.

Bundling can also lead to smaller providers being marginalised if they cannot provide the same inclusions or service quality because they do not have access to the same networks and content (i.e. the ability to provide access to the same television content as a larger competitor).[[48]](#footnote-48) Regulators need to make sure that enough service providers have access to wholesale inputs such as television and video content to provide competitive bundled offers.[[49]](#footnote-49)

However, bundles have the ability to increase competition if they increase choice, lower prices, and improve the quality of services available to consumers.[[50]](#footnote-50) Other benefits of bundling can include that products are offered at discounted rates, and just one customer service and billing system is needed for a range of services.[[51]](#footnote-51)

Elements of a bundle that need to be continued, particularly email addresses, are likely to increase stickiness and reduce consumers switching providers. ACCAN hears regularly from consumers and small businesses who have email address through their RSP, which is preventing them from switching to other providers despite the availability of plans that better suit their needs. Losing this element of the bundled plan would result in too much hassle and potential loss of business to be worth switching providers. RSPs have varying policies in relation to maintaining email addresses; some will sell this as a separate element while others only offer it with an ongoing plan. One ACCAN member, due to the need to keep email address associated with his business, has several plans with different RPSs as well as his preferred internet and voice service plans.

It is likely that the use of free additions to a service of bundle is having a significant effect on the products and services that are demanded. Shampanier et al in their study of the effect of zero pricing say that offering a free service as part of a bundle can have a dramatic effect on demand.[[52]](#footnote-52) They use the introduction of free shipping internationally by Amazon as an example. France mistakenly reduced its price, but not to zero like other countries, while orders increased in every other country, the demand in France stayed static. Free elements with a plan from telecommunication providers are likely to have similar effects and may significantly distort competition.

It is important that regulators implement measures to deter anti-competitive bundling behaviours and encourage competition. This can be achieved by introducing measures to increase transparency, make switching easier and by preventing providers from leveraging market power by using bundles.[[53]](#footnote-53) To increase transparency, regulators should require service providers to provide full and clearly disaggregated information on the cost of each component of the bundle.

## Response to question 6:

Are there any other emerging issues or trends in the communications sector that could affect consumers? Are there any consumer information needs that are likely to arise?

### Resolving problems with goods and services

Telecommunications providers no longer simply offer a telephone service. They may also offer goods to use with these services, including a mobile phone, tablet, or other wireless device. In addition, providers are increasingly offering other products such as home and internet security services, IoT devices and bundled subscriptions to OTT services such as Spotify and Netflix. Due to the plethora of devices and services that are used in conjunction with the underlying telecommunications service, it is often difficult for consumers to know how to resolve difficulties with their goods and services. The chart below shows the various places that a consumer may need to go to for support with their communications devices.

Figure : Graphical representation of the eight different suppliers that consumers engage with[[54]](#footnote-54)

This confusion creates competition issues because consumers should be able to make purchasing decisions with full knowledge of who they need to contact in case of problems with the product. For example, consumers may decide not to buy a device from a company with no Australian presence because that would make it harder to get support for the product.

Given the complementary relationship between competition policy and consumer protection, ACCAN believes that Australian Consumer Law regulators including the ACCC should continue to educate businesses and consumers about their rights and obligations for goods and services, and develop specific education materials for more complex service arrangements that are becoming more commonplace in the telecommunications sector.

# Emerging services

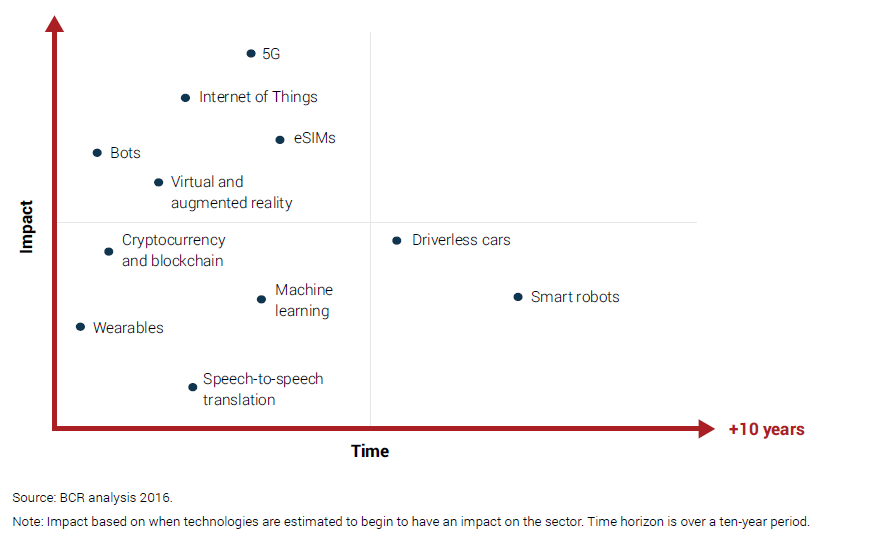
**Emerging services create an important competitive and innovative environment in the telecommunications sector. OTT services are used regularly by many consumers. ACCAN agrees with the ACCC that the constraints and inability to guarantee the underlying network limits the extent with which they are used.[[55]](#footnote-55) The Bureau of Communications Research mapped (image below) the expected impact and timeframe for different emerging services.[[56]](#footnote-56) Future OTT services are likely to encourage greater competition and innovation. It is important to monitor for any barriers that could reduce this potential.

Figure : Graph of the impact and timeframe for emerging services

*For the following questions ACCAN would like to note the distinction we are using with the use of the term ISP over RSP. ACCAN notes that RSPs on the NBN can provide internet and non-internet services.  For example, an RSP can provide an IP-TV service, for example FetchTV. This is a private information service. On the other hand, an RSP can also offer an internet service, which provides access to the Internet. The internet is an open public network built on a global set of principles.  Accordingly, we use the term RSP to refer to NBN providers who use traffic management procedures that can affect access to the entire public internet and not just affect access to any private information services that they may also provide to consumers.*

## Response to question 7:

Are there currently any barriers to entry for OTT service providers in reaching end-users, for example, in accessing devices, operating systems or network elements? Is this expected to change in the next few years? If so, how?

### Barriers at the network element level

From a technical perspective, the only factors that will necessarily constrain delivery of packets over the Internet are the quality of the sending server, the quality of the path end-to-end that the traffic takes, and the quality/efficiency of the underlying application software code. There previously have been barriers to some OTT service providers reaching regional consumers due to the need for certain technical standards in the network, such a low latency, and high data allowance.

While the NBN in most regions is likely to address this, OTT providers are likely to be unable to meet all Sky Muster consumers’ needs for high capacity and low latency services, such as video conferencing, business applications such as cloud computing, farm auctions.

Additionally, an ISP that follows industry standards may place barriers to block spam and botnets, or other interference with network integrity.[[57]](#footnote-57) [[58]](#footnote-58)

### Default apps by carriers, device manufacturers and operating system owners

Major carriers in Australia often place certain OTT apps on phones provided under contract. Consumers cannot delete these apps without installing an unauthorized version of the operating system. This exposure gives certain preinstalled OTT products an inherent advantage over other OTT apps and also contributes to the underlying data usage without the user able to control or constrain the usage. Behind the scenes usage has been measured to be approximately 70% of data consumption.[[59]](#footnote-59)

In addition to carriers, device manufacturers may preinstall certain apps on the phones. For example, Google imposes requirements on manufacturers of Android phones. These include:

1. Requiring customers who wish to access the Google Play app store to set Google Search as the default search engine and Google Chrome as the default web browser
2. Giving financial incentives to manufacturers and mobile network operators on condition that they exclusively pre-install Google Search on their devices.

The European Commission is currently investigating whether this conduct violates Europe’s competition laws. [[60]](#footnote-60)

There have also been allegations that Google requires manufacturer partners to increase the number of Google apps that must be pre-installed on the device to as many as 20. This could hinder the adoption of OTT services by non-Google providers. Google offers several OTT video and voice call services such as Google Messenger and Google Hangouts. These services compete with other OTT providers such as WhatsApp, LINE and Viber. Once again, this contributes to underlying device usage without consumer control.

### App Store developer guidelines

Application store aggregators such as Windows Store, Google Play, Apple’s App Store, and Apple’s Mac App Store have strict guidelines for software to be approved and made available to end users. These companies act as gatekeepers to the adoption and success of OTT services. The application of these guidelines is entirely at their discretion of and may be used to block competitors from accessing services.[[61]](#footnote-61) There is no external avenue of appeal for developers whose OTT apps are rejected from app store and similar application markets.

### Access to all device features

Some device manufacturers restrict the use of certain hardware features. For example, Apple does not permit any third party app to access the Near Field Communication chip (NFC) which allows for contactless payments on a mobile. Apple only allows access to the NFC chip for customers whose banks have reached a commercial arrangement with Apple to share revenue for each transaction. As a result, Apple Pay is currently only available in Australia for customers of ANZ and American Express. ACCAN notes that the ACCC is currently looking into Apple’s decision to keep the NFC chip closed to other banks and will issue a final decision in the coming months.[[62]](#footnote-62)

Any bank can utilize an Android phone’s NFC chip to make payments.[[63]](#footnote-63) However, these payments can only be made by going into a participating bank’s app. Google also offers a separate service called Android Pay, which allows customers to pay using a card without having to download or open a separate bank’s app. As with Apple’s NFC position, Google only allows banks with whom it has reached agreement to access its service.[[64]](#footnote-64)

## Response to question 8:

Are network operators honouring quality of service for IP voice traffic across their networks from OTT service providers? Is there evidence of ISPs seeking to undermine the provision of OTT services? If so, please describe.

Voice services will mostly be IP voice traffic in the future, making OTT IP a viable alternative to legacy services which consumers’ may consider. When consumers are purchasing IP voice services it is currently difficult to understand what level of service is being offered. We have no direct evidence about whether ISPs are honouring the quality of service (QoS) commitments for IP voice traffic from OTT service providers. Similarly, we have no evidence that ISPs are seeking to undermine the provision of OTT services. However, this may be an area where competition issues arise in the future.

We can identify no evidence of any commitments to OTT providers of VoIP services that any QoS parameters will be set to either enhance or downgrade their services over retail broadband networks. As referred to in a later question, the only reference is from iiNet to placing these services into a ‘best effort’ category.

## Response to question 9 and 12:

Does increased collaboration between ISPs and OTT service providers create any concerns for competition and consumer choice? If so, please describe.

Does the bundling of content with broadband access and other communications services currently create competition concerns? Is it likely to create competition concerns in the next five years? If so, how?

As OTT service such as VOIP and Netflix become more pervasive and reliable, consumers are less likely to value all elements of a bundle and more likely to subscribe to stand-alone broadband services. OTT services increase competition as they increase consumer choice – individuals are able to choose their own OTT providers and are not dependant on what a telecommunications retailer has included in a bundle.[[65]](#footnote-65) Below, we raise concerns about exclusive access, unmetered data and network neutrality.

### Exclusive access to content and unmetered data

In recent years, ISPs have begun to provide content services bundled with the underlying communications service. A recent online job advertisement for Optus stated that:

“We aren’t just a Telco anymore; we are a company of innovation, we have moved to the forefront of technology and *entertainment*. We are a part of the digital disruption, changing the way we deliver *media services and content to you*; continuing to create experiences that move you.”[[66]](#footnote-66)

This shift in business models is typical of other Australian and global ISPs.[[67]](#footnote-67) This trend raises several competition and network neutrality concerns.

In Australia, ISPs are increasingly using exclusive content agreements to attract customers. One example is Optus’ exclusive access to the English Premier League.[[68]](#footnote-68) This creates a large incentive for some consumers wishing to watch live sports on their phone or tablet to also purchase an Optus mobile service, even if the other features of the mobile service do not meet the consumer’s main needs.

Another issue that affects competition is the provision of unmetered data. For example, iiNet’s home broadband plans offer unmetered content from ABC iView, FetchTV, and Netflix. Another example is Telstra allowing customers to stream the AFL and NRL without using up their data. . This means if customers are not with Telstra or using Wi-Fi they are likely to exceed their entire monthly mobile data allowance (about 1GB per game) before a game even ends. This creates a large incentive for a consumer wishing to watch live sports on their phone or tablet to also purchase a Telstra mobile service. In the US, zero-rating/unmetered content is permitted as long as it does not “unreasonably interfere with or unreasonably disadvantage” the user’s ability to select and access content of their choice, or the content provider’s ability to make content available to users.[[69]](#footnote-69)This issue extends beyond the mobile market, with access to unmetered SVOD services such as Foxtel offered exclusively to Telstra home internet customers.[[70]](#footnote-70) Video streaming is one of the most resource intensive activities that can be done online. By translating viewing time into data usage we can get an idea of how compelling an unmetered offer becomes in consumer decision making. Foxtel’s video on demand service uses a maximum of 1,310 MB per hour.[[71]](#footnote-71) If the average viewer consumed all of their content through this service it would equate to about 143 GB a month. Given the average fixed broadband consumer currently only uses about 82GB a month,[[72]](#footnote-72) the ability to have content unmetered represents a significant market advantage for providers who can bundle their content and broadband.

There may also be a lack of transparency and consumer confusion where a piece of content is bundled but where the associated advertising content is not. ACCAN has seen reports of Verizon in the USA rebating customers for 1GB of data to watch football games, yet there is approximately 0.75GB of advertising in a typical game. This practice is also used in Australia. For example, Optus’ terms and conditions state:

“For technical reasons downloads, mobile and mobile broadband Wi-Fi hotspots, streaming or casting on TVs (such as through Chromecast and Apple TV), and other data such as DRM pings, advertisements, authentication and app analytics are excluded and will incur data charges.”

Whether this goes so far to be deceptive conduct or otherwise, the inability of the customer to estimate costs associated with bundled content is problematic. Both exclusive content agreements and unmetered content have the potential to affect competition on communications markets.

### Network neutrality

There is also a risk that ISPs will prioritise certain traffic over others because they own the content or otherwise have a commercial relationship with the content owner. This raises issues about network neutrality. Network neutrality is the principle that networks should not discriminate against or prioritise specific services, applications or content delivered over the internet.[[73]](#footnote-73) Concerns arise when internet traffic is subject to practices that are designed to limit competition and reduce innovation.

ACCAN does not have any evidence that Australian ISPs are engaging in this kind of conduct. However, there are some cases which raise questions about how network-owned or affiliated content traffic is delivered compared to other traffic. For example, iiNet has stated that it prioritises the delivery of its FetchTV service above all other traffic. In response to a user’s question about iiNet’s traffic management of P2P Bittorrent services, iiNet has acknowledged that: [[74]](#footnote-74)

We don't de-prioritise it [Bittorrent] we can't identify it. We just leave a whole bunch of traffic completely alone. In that 'left alone' stream is all sorts of stuff including Bittorent.

*What we do is make sure traffic like FetchTV is not affected (people pay extra for that, it's a reasonable thing to ensure it doesn't lose out when competing with 'junk' traffic).*

This could mean that some customers who purchase such services have overall slower internet speeds simply because they do not have the need for the premium service bundled with the product. This potentially disadvantages the majority of customers who are still paying the ISP for a baseline internet service.

Overseas, the USA and EU have recently adopted network neutrality rules which prohibit paid prioritization of traffic for retail consumer services, throttling and blocking traffic (with exceptions for “reasonable traffic management”).[[75]](#footnote-75) The incidence of services that breach net neutrality will need to be monitored closely to determine whether similar market intervention is warranted in Australia. A consideration in how net neutrality issues are approached is the potential impact on the delivery of future public interest services.[[76]](#footnote-76)

## Response to question 10:

Does the lack of interoperability and portability of data among different OTT services create competition issues? If so, how? Is this likely to change in the next five years?

The lack of interoperability and portability of data causes friction when consumers consider switching providers and which company to choose. If consumers are unable to bring their data to new devices then they will likely lose any benefit and learning from that data. For example, if consumers use a service to tracking their health and fitness and are unable to port that data to another service they will lose the ability to compare and track their health and fitness. Likewise if devices or services do not ‘talk’ to each other then it limits the usefulness of the services. Consumers, in order to benefit from the services, may be restricted to using OTT services or devices from the same provider. As more intelligent OTT services and devices are used by consumers this issue is likely to increase. The first company to capture the market is likely to benefit and any competitors are likely to struggle to gain market share.

## Response to question 11:

What does the emergence of OTT services mean for the current economic regulatory framework for the communications sector?

OTT services place a greater need for transparency in the relationships that exist between the network and RSP and the OTT services. Regular monitoring may be required to ensure that preferential treatment does not exist.

## Response to question 13:

How prevalent is the use of data traffic management procedures by Australian network operators?

It is reasonable to expect that every Australian ISP uses data traffic management procedures; as it is impossible to operate a network without having rules to manage network congestion given the history of internet traffic growth. However disclosure of traffic management policies by Australian ISPs is wholly inadequate.

ACCAN has reviewed publically available information of the top four ISPs in Australia. Only two of the ISPs provide information about their traffic management policies.

Where there was disclosure of traffic management policies, that disclosure was very weak, extremely broad and ‘hidden’ in long-form contractual documents. The two ISPs surveyed had such broad statements as to permit the prioritisation of any traffic without clear reasons at any time.For example, Optus states this:

2.4 Changes we may make to the service[[77]](#footnote-77)

(a) Subject to any obligation we have under clause 2A (Changing the Agreement) of the consumer terms or clause 2A (Changing the Agreement) of the SMB terms (as applicable), we may modify an aspect of the service or the delivery of the service if it is necessary to do so for the efficient operation of the network used to supply the service. For example, we may apply controls to:

(i) prioritise internet traffic of certain types or users over others;

(ii) block or filter specific internet ports;

…

Another provider included a similar blanket clause, but also provided some examples of what traffic may be prioritised: [[78]](#footnote-78) The paucity of information about traffic management means that consumers’ cannot chose a broadband service that is tailored to their needs. Consumers should be able to select a broadband services that is likely to provide their desired speeds at their desired times for their desired applications. For example, a financial advisor may need high-quality access to live stock data over a particular protocol, but is unlikely to care if they have very slow SVOD services.

Consumers need clear, transparent information about network traffic management before acquiring an internet service and throughout the life of the contract. Key industry participants agree that disclosure is both feasible and appropriate.[[79]](#footnote-79)

In the UK, industry has developed a common information standard for outlining ISP traffic management practices (see image below).[[80]](#footnote-80) ACCAN believes there is merit in adopting a similar model in Australia. In the US, there is also a requirement to disclose network management practices.[[81]](#footnote-81) Furthermore, service providers should be encouraged to sign onto standard operating approaches as provided in best practice documents.[[82]](#footnote-82)

Given the overlapping issues between broadband speed and network congestion, it may be appropriate for the ACCC to require disclosure of network management procedures if it decides to introduce broadband performance guidelines.

## Response to question 15:

Are there any barriers to the use of pricing signals to manage network demand? If so, please describe.

Australian ISPs use price signals to manage network demand in some instances. For example, ISPs offer off-peak data allowances for use during the late-night and early morning periods. One significant barrier often cited by service providers to using pricing signals is the flexibility of billing systems.

## Response to question 16:

Do current data traffic management procedures impact on services, service quality and competition? If so, how can they benefit consumers? Can some applications be deprioritised with no perceptible impact for consumers?

In our answer to question 13, we referred to several ISPs policies on network traffic management. Part of this traffic management involves prioritising ‘time sensitive traffic.’ Services that are time-sensitive include VoIP, financial trading, gaming and IP-TV streaming movie services.[[83]](#footnote-83) Accordingly, these services are the most common current beneficiaries of traffic management procedures. Some applications can suffer a certain amount of packet loss while still providing a reasonable quality of service, while other applications will simply be unusable if there is more than a minor amount of packet loss.

Some data traffic management procedures may benefit consumers. For example, many ISPs use packet compression technologies and content transcoding to provide content suited to the specific user’s device and the level of network congestion. This can be an effective way of reducing the bandwidth required for these popular types of traffic and reducing the likelihood of congestion in the first instance. Again, however, it is important that there are opt in and opt out mechanisms as substitution of a low resolution image for a high resolution one may lower bandwidth utilization and be acceptable for casual browsing, but not acceptable for a professional photographer attempting to earn a living by the transfer of images.

## Response to question 17:

What traffic management procedures have the biggest impact on end-users and why?

Blocking has the biggest impact on end-users and has no place in network traffic management (except where blocking is wholly consistent global recognized industry standards such as the Internet Engineering Task Force’s Best Current Practice Documents – examples include malware and spam blocking).[[84]](#footnote-84) For any other blocking, ACCAN has advocated for rigorous regulatory mechanisms to protect consumers’ right of access to the wide range of innovative services on the Internet.

In Australia, many ISPs throttle all traffic if customers exceed data caps. Of concern are consumers signing up to “unlimited” data plans, only to be told by their ISP that they breached a Fair Use/Acceptable Use or similar policy. Recently, an Australian ISP forced customers on unlimited data plans to change their plans during a contract because they were using too much data and allegedly reducing the performance of the network for the majority of users. In that case, the ACCC discovered the conduct and ordered the ISP to refund the difference in price between the new and old plans for the life of the contract.[[85]](#footnote-85)

ACCAN does not consider that paid prioritization is a legitimate form of network traffic management. We discuss this issue in our answer to questions 9 and 12.

## Response to question 18:

Are there any other strategies that could be used to deal with congestion issues, particularly if network congestion worsens in the future? If so, please describe.

Network congestion is predicted to increase as a result of increased demand for data. Estimates show that total busy hour internet traffic will grow over four times between 2015 and 2020.[[86]](#footnote-86) ACCAN notes the ACCC’s consultation about broadband performance and believes more transparency about actual service performance will allow ISPs to openly point to future investment when required. While no ISP can provide ample bandwidth for every customer link to sit at maximum utilization at all times, a good ISP builds their network so that it can provide adequate throughput even during peaks of demand.[[87]](#footnote-87)

## Response to question 19:

Are there any trends emerging from the adoption of IoT and M2M technologies that could materially impact the communications sector in Australia?

Most IoT devices are reliant on an underlying service offered by the device manufacturer for continued operation. A consumer’s ongoing enjoyment of these products often depends on paying a subscription fee to use the product they have ‘purchased’. Recently it was revealed that Revolv (owned by Google) hardware would no longer be supported after June 19, 2016.[[88]](#footnote-88) Consumers who had spent thousands of dollars on hardware to create smart homes were left with useless hardware and were offered no compensation for this loss.

In the future, these devices could be bundled together with mobile and fixed-line broadband products. In the event that these products are discontinued, there is no redress for the consumer who has chosen the bundle based on price and included features. Interoperability issues may also pose a threat to competition in IoT goods and services in Australia. Apple and Google have both introduced separate incompatible standards for IoT home devices.[[89]](#footnote-89) It is not yet clear if Apple and Google have entered into arrangements with IoT device manufacturers to ensure that they are exclusive to the Apple or Google platform and cannot be used on competing platforms. The ACCC should closely monitor this area.

Recent events have also shown IoT devices to be woefully insecure.[[90]](#footnote-90) It is arguable that many of these products are not fit for service and may cause a range of cybersecurity problems for consumers from minor inconvenience, such as having to reinstall software or minor increases in traffic use (and therefore charges), through to significant identity fraud or theft. The responsibility for ensuring that these devices are secure for normal, expected operation has been left to consumers, however there may be a role for the ACCC to consider whether this responsibility is fair and reasonable.

It is arguable that there is existing unrecognized liability from network termination equipment (home gateways) already in the broadband access market. Retail ISPs and consumer electronics stores often supply and ship network access equipment without changes to default passwords.[[91]](#footnote-91) Where this is the case there is the potential for serious harm to both the consumer purchasing the service and to other consumers connected to both the retail provider’s network and the Internet more broadly.[[92]](#footnote-92)

## Response to question 20:

Is the emergence of IoT and/or M2M changing the nature of competition in the provision of communication equipment and/or services? If so, how? Are these developments likely to have significant implications for market structures, supply chains and business models? If so, how?

By 2021, Telstra predicts that the IoT “at home” market is could be at least $1 billion,[[93]](#footnote-93) with another estimate reaching as high as $3.2 billion.[[94]](#footnote-94) By the end of 2016, Telstra will introduce two IoT SmartHome packages. One package will offer home security goods and services and the second will offer solutions for smart energy usage.[[95]](#footnote-95) It is possible that other carriers will follow suit by providing similar services.

It is too early to tell if distribution arrangements between carriers, phone and consumption devices manufacturers, and IoT device manufacturers will affect competition in the provision of communications equipment and services. IoT will also have a substantial effect in the industrial and commercial sectors, allowing businesses to use sensors to track the location, quality and other characteristics throughout the supply chain. Many of ACCAN’s members are small businesses who are likely to use IoT devices for these purposes. There may be a need for future intervention should evidence arise of anti-competitive conduct that hinders the uptake of these products which have the potential to dramatically increase the productivity of Australian small businesses.

# Fixed-line voice and broadband services

## Response to question 22:

Is there competition in the supply of retail fixed-line voice and broadband services supplied over both Telstra’s legacy access network and next generation networks, including the NBN? If so, how would you describe the state of competition, what form is it taking (price and non-price differentiation) and how is it likely to evolve? What are the key factors shaping the competitive state? Please provide details and examples.

Recent competition theory suggests that there should be at least five firms with no more than 40% market share each and easy entry for newcomers.[[96]](#footnote-96) Telstra has over 40% market share in fixed voice and fixed broadband services and is maintaining this over nbn.[[97]](#footnote-97) The level of competition is affecting the choice and price paid by consumers in regional areas. Consumers in regional areas, over legacy networks, are likely to have fewer options of providers at their exchange.[[98]](#footnote-98) This trend is continuing over NBN, with not all providers offering services in regional areas and consumers in these areas only having access to higher cost services.[[99]](#footnote-99) This could be due to the range of costs in connecting to all consumers in Australia. A resulting reduced choice, or lower performance if providers are pricing nationally and can only afford reduced capacity in regional areas, is a concern.

Furthermore, consumers in the most remote and rural areas, on Sky Muster nbn services, will face the highest prices and lowest choice of providers. The recent announcement by Vodafone and amaysim to enter the nbn fixed line market is likely to have a positive effect on competition,[[100]](#footnote-100) particularly if these providers will offer services nationally over all nbn technologies and bundle the services with mobile voice and data (where they have coverage in these areas).

Much of the competition over nbn appears to remain focused on data inclusions and price. Competition on factors such as performance and speed and customer service (outlined above) is not as evidential. ACCAN strongly believes that these other factors are important for consumers’ and could be used to create a greater range of competition.

## Response to question 23:

What impediments are there to RSPs winning new customers during the transition to supply of fixed-line services over next generation networks, including the NBN? Please provide details and examples including with reference to those possible impediments noted above.

The switch over to NBN can be a difficult process for consumers, in terms of understanding what is required of them and which services they need. Switching to a new RSP during this time often makes it more complicated. Consumers switching providers may face periods without any service (disconnection of the legacy service before the NBN is functioning), paying for multiple services (the installation, switch over and billing periods not aligning), losing their number or paying to exit previous contracts (early termination fees). Often it is easier to stay with the same provider in the transition. ACCAN is providing a few case studies below to demonstrate the impediments to increased competition over NBN.

Case Study: ACCAN was contacted by an elderly consumer living in South Australia who transitioned to NBN in September 2016. They switched providers from Primus to Optus and unfortunately lost their number in the process. The consumer was told that the “technology was too old for them to keep their number”.

Case Study: ACCAN was contacted by a consumer in Tasmania in July 2015. They chose to switch to TPG while moving over to NBN. TPG charged the consumer immediately for the first month in advance, prepayment for calls not included in the plan, equipment postage and the set up costs. The installation appointment was made for two months later. As the consumer needed to continue to pay for their current services and were not in a position to pay for the new services two months before it was useable they cancelled the new provider and chose to switch to NBN with their current provider.

Additionally, a number of consumers have contacted ACCAN with grievances with RSPs/nbn in cases where they have been unable to connect to a service due to the switch over. These consumers have moved into an area and not previously had services at the address. Due to the availability, or soon to be availability, of nbn the consumer has been unable to get a service within a sufficient time frame, sometimes waiting months to be connected to any service. This has caused frustration and bad feeling about RSPs inability to provide services, in some cases consumers are looking to alternative platforms and technologies for services.

## Response to question 29:

What refinements to NBN pricing could improve RSPs ability to compete on the NBN and to develop products to meet business and consumer needs? Please provide details and ensure your response takes account of the requirements of the SAU, the economies of scale associated with the network and the legitimate commercial interests of NBN Co to recover its costs.

Entry level internet and voice plans provide very little return for NBN or RSPs. Additionally as NBN is restricted in the amount that it can increase prices, in the Special Access Undertaking, and in order to earn the return that it needs it will need to ensure a high take up rate or a large number of consumers purchasing higher tier plans. This promotes higher tier plans to be promoted to consumers. Consumers who are low users of the internet or only require a voice plan are likely to find better value in other telecommunications platforms, such as mobile.

## Response to question 30:

Does NBN Co’s current dimension-based discount for CVC improve the opportunity for competition in the provision of fixed-line voice and broadband services? Please provide details. What would be the impact of a dimension-based discount which reflected RSP use, rather than industry specific use? More specifically, will the size and timing of any discounts impact competition?

CVC discounts are needed in order for the RSPs to adequately provide the level of service offered and needed. The current timing of the CVCs discounts, following consumption increases, are likely to dampen the increase of data usage and impact on competition. As outlined above, in response to question 18, data is expected to increase rapidly. If the CVC pricing is not set at a level which allows for the expected amount of data to be provided affordably then consumers are likely to suffer from slow speeds and look for other service providers in the hope that they can deliver the service needed.

ACCAN has concerns that the dimension-based discount which reflects RSP use, may not deliver the intended impact without further visibility for consumers. Varying levels of provisioning by RSPs should be a competitive element of plans. Consumers, however, will not easily see the CVC pricing that is being paid by each RSP. Additionally, RSPs are not likely to signal to consumers that they are offering lower or higher performing services; rather it is in their interest to signal through a high price that they are a high quality product.[[101]](#footnote-101) Visibility over the level of provisioning is likely to result in more competition than individual pricing discounts.

## Response to question 33 & 34:

Are there any barriers to entry for RSPs supplying fixed-line voice and broadband services on the NBN and other next generation networks? Or any other factors affecting the competitive supply of these services? Are there any particular issues which impact smaller RSPs?

Are there any implications for competition, and outcomes for consumers, as a result of the presence and ongoing operation of regulated non-NBN next generation networks?

ACCAN regularly hears about the effect and harm which results from being served by a monopoly network that restricts their choice and services.[[102]](#footnote-102) This includes frustration about not being able to access the range of offers available in the market, bundled plans (fixed and mobile services); content that is tied to certain providers and the range of download and upload speeds needed. The level of service guaranteed, the connection and repair timeframes, the complaint systems, safeguards and the ability to compare services on offer are also important for these end users. The presence and ongoing operation of regulated non-nbn next generation networks appears to be limiting the choice that consumers have in RSPs. Non-NBN networks do not have the range of RSPs that offer services over NBN.

The operation of NBN and non-NBN networks operate under a number of regulations which aim to deliver a variety of outcomes.[[103]](#footnote-103) For consumers this can be complicated, with the number of providers, guarantees and level of service offered varying depending on which network they are connected to. RSPs are not required to operate over any of the networks, rather the regulation and legislation places the requirement on the non-NBN network to secure a range of RSP which it offers wholesale services to.

# Mobile voice and broadband services

Mobile coverage was found to be the primary concern for consumers in the Glasson, Sinclair and Shiff Regional Telecommunication Reviews. The ACMA reported that regional consumers were more likely to be mobile only, that 15% of consumers in regional areas are exclusively mobile users. This is greater than the capital city figure of 10% of consumers.[[104]](#footnote-104) If mobile coverage and competition were available more extensively in regional areas then consumers are likely to benefit.

The Mobile Black Spot Programme (MBSP) will improve coverage for some consumers; however it has not resulted in as much coverage expansion as expected.[[105]](#footnote-105) Additionally, such a program will not address all consumers’ needs. Funding from round one and two will not address the less economical regional and remote black spots identified. Furthermore it is likely that the lack of backhaul to the proposed locations will increasingly become an issue and reduce the likelihood of further extensions. It is likely that the MBSP will end before all premises have coverage. Programs that encourage, and funding for, increased coverage are needed. This funding should ensure that the technology is available on an open access based to ensure that competition is not impacted.

Choice of provider is important for consumers. While the population difference between the networks is small, the resulting population and areas that do not have access to a range of providers is significant. MVNOs have had a positive impact for consumers in expanding choice of providers, however, we are aware that there are varying agreements between the MNOs and MVNOs in relation to the network that they are able to access. This can be confusing for consumers and difficult to understand where the service will work.

## Response to question 40:

Are there other competitive issues in the mobile services market?

Recent developments in mobile service portability has both helped and hindered competition in the sector. To date, if a consumer wished to acquire a new mobile service, they had to purchase a new SIM card from a particular carrier. The consumer would either have to purchase a SIM card at a retail outlet or wait for a SIM card to arrive in the mail. However new technology has removed this need.

Apple ships some iPads in Australia with an “Apple SIM”. This is a physical generic SIM card that allows consumers to sign up for a data plan on the device. In addition, manufacturers have begun to adopt embedded SIM (e-SIM) technology. E-SIMs are not physical SIMs, but are incorporated into the hardware of the phone. This allows consumers to activate or switch carriers for mobile or mobile broadband service without having to purchase a physical SIM card. There is also potential flexibility to allow the customer to have multiple services on the same device (although it is not clear if whether they can be used simultaneously).

However, there are clear competition issues, with the e-SIM and Apple SIM models. In Australia, consumers can only select a plan with Optus, Vodafone and Telstra.[[106]](#footnote-106) Consumers cannot sign up for a service with any MVNOs. Faced with a shiny new device, a consumer is much more likely to want to buy a service then and there rather than wait to buy a SIM card. While it is not the regulator’s responsibility to require free advertising for all services in every sector, there are some cases where product placement and convenience will have an anti-competitive effect if not offered to all services. We believe this is one such case.

# Interaction between fixed line and mobile services

## Response to question 52:

What factors influence consumers’ choice of communications platform, and how are these changing? Please provide details and examples.

Largely the choice of communications platform is influenced by capacity allowance and coverage of the technology. Until recently mobile platforms only allowed very small amounts of data and were priced at higher rate than fixed line. This is beginning to change with increased data available on mobile plans. Most recently, Optus released a 200GB home wireless plan for $80 a month which would be sufficient for the average household usage currently and compare with fixed line offerings.[[107]](#footnote-107) Likewise other platforms, such as fixed wireless and mobile solutions, are geographically restricted to certain areas.

The quality and reliability of voice services is also likely to affect consumer’s choice of platforms. As discussed in response to question 1, there are increasing complaints about the standards of fixed phone services. Consumers, anecdotally, have told us that they are switching to mobile technologies as the fixed phone is not sufficiently reliable and mobile offers better value for money. Additionally, as consumers switch to NBN, it is likely that they may consider their requirements for a fixed voice service where viable.

## Response to question 54:

Are there factors currently limiting further substitution between mobile and fixed-line voice and broadband services? If so, what are these factors?

Coverage, awareness and an uncertainty over the level of quality may be limiting to an extent the substitution for these services. This is particularly true for consumers in regional and remote areas who may require a number of platforms (Satellite, mobile and fixed line) to ensure continuity of services and to meet the quality and reliability that they need.

## Response to question 55:

How will substitution between fixed-line and mobile voice and broadband services develop in the future? How will the development of 5G mobile networks and the growth of Wi-Fi services impact substitution between the two services?

5G and other services are likely to increase the level of substitution as they are likely to offer a more equivalent level of inclusions (higher amounts of data) and quality of service as fixed line platforms (faster speed levels). The extent of the coverage of 5G and Wi-Fi services will affect the level of substitution.

1. Issues paper pg. 16 provides examples of GP videoconferencing, mobile payments, 24-7 chats, videoconferencing etc. [↑](#footnote-ref-1)
2. ACCAN, Connected Consumers position statement, June 2016. <https://accan.org.au/our-work/policy/1245-the-future-of-consumer-focused-communication-services> [↑](#footnote-ref-2)
3. Department of Communications, 2014. Broadband Availability and Quality Report. Only approximately 28% of premises have access to high speed broadband. Approximately 6% of premises cannot access fixed broadband services and nearly 1 million premises receive speeds below 4.8Mbps <https://www.communications.gov.au/publications/broadband-availability-and-quality-report> [↑](#footnote-ref-3)
4. TIO 2015 Submission to the Productivity Commission. <http://www.pc.gov.au/__data/assets/pdf_file/0020/205490/sub052-telecommunications.pdf> [↑](#footnote-ref-4)
5. As demonstrated by the high take up of Netflix streaming services since its introduction to the Australian market in April 2015. <http://www.businessinsider.com.au/netflix-just-cracked-10-of-the-australian-market-2015-10> [↑](#footnote-ref-5)
6. ACCAN Get Connected. <https://accan.org.au/broadband/get-connected> [↑](#footnote-ref-6)
7. ACCAN Small Business Survey, 2016. Preliminary analysis of result. To be published. conducted from July to August 2016 [↑](#footnote-ref-7)
8. ACCAN submission to SAU outlines concerns about the range of service offerings over NBN MTM technologies. <https://accan.org.au/our-work/submissions/1295-special-access-undertaking> [↑](#footnote-ref-8)
9. Maddocks. NBN pricing model puts hand break on speed. [Https://www.maddocks.com.au/blog/nbn-pricing-model-puts-hand-break-speed/](https://www.maddocks.com.au/blog/nbn-pricing-model-puts-hand-break-speed/) [↑](#footnote-ref-9)
10. De Ridder, John, April 2016. Let’s abolish CVC pricing and the IRCA! <http://deridder.com.au/site/wp-content/uploads/2016/04/COMMUNICATIONS-DAY-7-4-2016.pdf> [↑](#footnote-ref-10)
11. Thomas, R, 2016 Consumers feel the need for speed: why increased visibility over broadband performance will empower consumers. Australian Journal of Competition and Consumer Law [↑](#footnote-ref-11)
12. For example Telstra basic phone plans changed in October 2016. Consumers that are out of contract and remain on their plan may benefit from switching to a newer plan or even another provider. [↑](#footnote-ref-12)
13. Harrisson, Paul, Hill, Laura ad Gray, Charles, 2016. Confident but confounded: Consumer Comprehension of Telecommunications Agreements. Australian Communications Consumer Action Network, Sydney. [↑](#footnote-ref-13)
14. ACCC, ASIC and all state and territory ACL Regulators, ‘Unfair contract terms A GUIDE FOR BUSINESSES AND LEGAL PRACTITIONERS’, March 2016, available at <<http://consumerlaw-staging.tspace.gov.au/files/2016/05/0553FT_ACL-guides_ContractTerms_web.pdf>> at p. 15. [↑](#footnote-ref-14)
15. Tony Ibrahim, ‘Optus woos new customers with $450 credit for cancellation fees’, PCWorld, 8 September 2014 available at <<http://www.pcworld.idg.com.au/article/554441/optus-goes-after-telstra-vodafone-customers-by-crediting-cancellation-fees/> [↑](#footnote-ref-15)
16. Optus, ‘Optus says yes to a new phone early’, 11 March 2016, <<https://media.optus.com.au/media-releases/2016/optus-says-yes-to-a-new-phone-early/> [↑](#footnote-ref-16)
17. John de Ridder, ‘Why you should buy a phone and add a SIM card separately’, 12 September 2016, available at <<http://deridder.com.au/site/wp-content/uploads/2016/09/iPhone-7-study.pdf>> at page 11. [↑](#footnote-ref-17)
18. Only consumers in FTTP areas, or about 20% of premises, will have an optional battery backup to ensure services continue to work in power outages and have informed consent obligations. [↑](#footnote-ref-18)
19. see ACCAN Disability Mystery Shopping <https://accan.org.au/our-work/submissions/953-accan-s-disability-mystery-shopping-report> [↑](#footnote-ref-19)
20. Market Clarity, 2015. Informing Small Business: Examining fixed phone and broadband products. Australian Communications Consumer Action Network, Sydney. [↑](#footnote-ref-20)
21. 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-21)
22. ACCAN 2016, A Guarantee for the future policy position. <https://accan.org.au/files/Position_Statements/ACCAN%20policy%20position%20on%20a%20customer%20service%20and%20reliability%20standard.pdf> [↑](#footnote-ref-22)
23. Telstra, 2016, ‘Update on our mobile network disruption and free data day’, available at: <http://exchange.telstra.com.au/2016/03/18/update-on-our-mobile-network-disruption-and-free-data-day/> [↑](#footnote-ref-23)
24. Matthew Dunn, ‘Telstra customers want early termination, not free data for recent network errors’, 23 March 2016, available at <<http://www.news.com.au/technology/gadgets/mobile-phones/telstra-customers-want-early-termination-not-free-data-for-recent-network-errors/news-story/cc6b2656c0bb266e2faf06e8ff4286d6>> [↑](#footnote-ref-24)
25. *Competition and Consumer Act 2010* Schedule 2 [↑](#footnote-ref-25)
26. Kate McKenzie, ‘An update on today’s mobile outage’, *Telstra Exchange*, 9 February 2016, available at <<https://exchange.telstra.com.au/2016/02/09/an-update-on-todays-mobile-outage/>>. [↑](#footnote-ref-26)
27. Adams, P. 2008, Handbook of Research on Global Diffusion of Broadband Data Transmission, Chapter XIX Factors Affecting Broadband Adoption for Mainstream Consumers. [↑](#footnote-ref-27)
28. Ariely, D & Norton, Michael, From thinking too little to thinking too much: a continuum of decision making <http://people.duke.edu/~dandan/webfiles/PapersOther/A%20continuum%20of%20decision%20making.pdf> [↑](#footnote-ref-28)
29. Ariely, D & Norton, Michael, How actions create – not just reveal – preferences. <http://people.duke.edu/~dandan/webfiles/PapersIY/HowActionsCreate%20Preferences.pdf> [↑](#footnote-ref-29)
30. Productivity Commission, Public Inquiry into Data Availability and Use, http://www.pc.gov.au/inquiries/current/data-access#draft [↑](#footnote-ref-30)
31. See ACCAN’s submission to the Productivity Commission, <http://accan.org.au/PC%20Data%20Availability%20and%20Use%20submission%202016.pdf> [↑](#footnote-ref-31)
32. Office of Fair Trading, 2010, ‘What does Behavioural Economics mean for Competition Policy?’, March 2010, at p5. [↑](#footnote-ref-32)
33. <http://www.which.co.uk/money/bank-accounts/guides/switching-your-bank-account/what-is-midata>; (accessed 20 July 2016). [↑](#footnote-ref-33)
34. It is important to note that a scheme such as midata still presents privacy risks for consumers, which are addressed later in this submission. [↑](#footnote-ref-34)
35. https://www.billmonitor.com/ [↑](#footnote-ref-35)
36. http://blog.billmonitor.com/post/48733514754/billmonitorcom-prescribes-a-tariff-diet-to-he [↑](#footnote-ref-36)
37. Issues paper pg.21. [↑](#footnote-ref-37)
38. ACCAN, 2016. What ’28 day months’ mean for you. https://accan.org.au/hot-issues/1174-what-28-day-months-mean-for-you [↑](#footnote-ref-38)
39. Musolino, V & Ogle, G, 2016, Analogue entitlements in a digital age: Preliminary data briefings on income support and the digital divide. Australian Communications Consumer Action Network, Sydney. [↑](#footnote-ref-39)
40. whistleOut, 2016, available at: <https://www.whistleout.com.au/> ; Finder.com.au, 2016, available at: <http://www.finder.com.au/> [↑](#footnote-ref-40)
41. ACCC, Comparator websites - A guide for comparator website operators and suppliers, August 2015, available at   
    <<https://www.accc.gov.au/system/files/CSBS%20-%20Comparator%20web%20sites%20project%20-%20Industry%20Guidance%20-%20final.pdf>>. [↑](#footnote-ref-41)
42. Energy Made Easy, 2016, available at: <https://www.energymadeeasy.gov.au/> [↑](#footnote-ref-42)
43. Silva-Goncalves, J, 2015, ‘Australians’ switching behaviour in banking, insurance services and main utilities’, QUT and Heritage Bank. [↑](#footnote-ref-43)
44. ACCAN August 2016 submission to ACCC. <http://accan.org.au/our-work/submissions/1291-broadband-speed-claims> [↑](#footnote-ref-44)
45. Macquarie Telecom to publish real time NPS. <http://www.zdnet.com/article/macquarie-telecom-to-publish-real-time-nps/> [↑](#footnote-ref-45)
46. Paul Harrison, ACCAN, Seeking Straight Answers: Consumer Decision-Making in Telecommunications, 2011, <http://accan.org.au/files/Reports/Seeking%20Straight%20Answers%20Report.pdf> at 19. [↑](#footnote-ref-46)
47. OECD 2015 at 7 [↑](#footnote-ref-47)
48. OECD 2015 at 2. [↑](#footnote-ref-48)
49. OECD 2015 at 8. [↑](#footnote-ref-49)
50. OECD 2015 at 2. [↑](#footnote-ref-50)
51. OECD at 5. [↑](#footnote-ref-51)
52. Shampanier, Mazar, and Ariely: Zero as a Special Price: The True Value of Free Products. Marketing Science 26(6), pp. 742–757, © 2007 INFORMS <http://people.duke.edu/~dandan/webfiles/PapersPI/Zero%20as%20a%20Special%20Price.pdf> [↑](#footnote-ref-52)
53. OECD at 5. [↑](#footnote-ref-53)
54. Created by ACCAN [↑](#footnote-ref-54)
55. Issues paper 5.9 pg. 25. [↑](#footnote-ref-55)
56. Bureau of Communications Research, 2016, The Communications Sector: recent trends and developments. <https://www.communications.gov.au/sites/g/files/net301/f/bcr_environmental_scan_report_05.pdf> [↑](#footnote-ref-56)
57. Many ISPs block malware through voluntary compliance with Industry Code – C6 50:2014 – iCode – Internet Service Providers Voluntary Code of Practice for Industry Self-Regulation in the Area of Cyber Security. [↑](#footnote-ref-57)
58. Mutually Agreed Norms for Routing Security (MANRS) https://www.routingmanifesto.org/manrs/ [↑](#footnote-ref-58)
59. Who do you sync you are? Smartphone Fingerprinting via Application Behaviour, Stöber et al 2013 ACM 978-1-4503-1998-0/13/04 [↑](#footnote-ref-59)
60. European Commission, ‘Antitrust: Commission sends Statement of Objections to Google on Android operating system and applications’, 20 April 2016, Brussels, available at <<http://europa.eu/rapid/press-release_IP-16-1492_en.htm>>, full case at: European Commission, Competition Cases - 40099 Google Android, available at   
    < <http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=1_40099>>; [↑](#footnote-ref-60)
61. Soon after the iPhone was released, Apple was accused of blocking access to OTT voice services, Tony Bradley, ‘AT&T and Apple Admit Deal to Block VoIP on iPhone’, 24 August 2009, *PCWorld*, available at <<http://www.pcworld.com/article/170661/apple_att_fight_voip_on_iphone.html>> [↑](#footnote-ref-61)
62. ACCC, ‘ACCC continues its review of banks’ application for authorisation to collectively bargain with Apple’, 19 August 2016, available at   
    <[https://www.accc.gov.au/media-release/accc-continues-its-review-of-banks%E2%80%99-application-for-authorisation-to-collectively-bargain-with-apple](https://www.accc.gov.au/media-release/accc-continues-its-review-of-banks’-application-for-authorisation-to-collectively-bargain-with-apple)> [↑](#footnote-ref-62)
63. Google, ‘New NFC capabilities through Host Card Emulation’, available at <<https://developer.android.com/about/versions/kitkat.html>> [↑](#footnote-ref-63)
64. Google, ‘Android Pay’, available at <<https://www.android.com/intl/en_au/pay/>>. [↑](#footnote-ref-64)
65. OECD 2011 at 27-28. [↑](#footnote-ref-65)
66. Optus Job Advertisement, as at 16 October 2016, available at <[http://web.archive.org/web/20161018223534/https://groupcareers.singtel.com/job/Sydney-Digital-Strategy-Analyst-Sydn/369648000/](http://web.archive.org/web/20161018223534/https:/groupcareers.singtel.com/job/Sydney-Digital-Strategy-Analyst-Sydn/369648000/)> [↑](#footnote-ref-66)
67. In October 2016, US carrier AT&T agreed to buy Time Warner (which owns the HBO pay-tv channel, cable channels that including CNN and the Warner Bros movie studio). Earlier in 2016 another US carrier Verizon agreed to purchase Yahoo’s content and advertising businesses. Both mergers are conditional on approval from the Department of Justice which oversees competition law in the United States. In 2012, ISP Comcast merged with NBC Universal, picking up its pay-tv and movie studio assets. [↑](#footnote-ref-67)
68. Optus, ‘Premier League’, available at <<https://offer.optus.com.au/epl>>. [↑](#footnote-ref-68)
69. FCC, ‘In the matter of Protecting and Promoting the Open Internet’, Report and Order on Remand, Declaratory Ruling, and Order’ adopted 26 February 2015, available at <<https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-24A1_Rcd.pdf>> at page 5609 at para [21]; Jon Brodkin, ‘FCC votes for net neutrality, a ban on paid fast lanes, and Title II’, Ars Technica, 27 February 2015, available at <<http://arstechnica.com/business/2015/02/fcc-votes-for-net-neutrality-a-ban-on-paid-fast-lanes-and-title-ii/>>. [↑](#footnote-ref-69)
70. Foxtel, 2014, ‘Get started with Foxtel Go’, 03/06/2014 available at: <http://www.foxtel.com.au/support/ondemand-apps-extras/get-started-with-foxtel-go-216947.htm> [↑](#footnote-ref-70)
71. Foxtel, 2014, ‘Support’ available at: <http://www.foxtel.com.au/foxtelplay/support/default.htm> [↑](#footnote-ref-71)
72. ABS, 2015. Internet Activity, Australia. 8153 [↑](#footnote-ref-72)
73. Commonwealth Government, ‘Convergence Review: Final Report’, March 2012, available at <<http://www.abc.net.au/mediawatch/transcripts/1339_convergence.pdf>> at p.30 [↑](#footnote-ref-73)
74. Steve Dalby, *Whirlpool*, posted 2012-Aug-10, 5:17 pm, available at <<http://whrl.pl/RdhioM>> [↑](#footnote-ref-74)
75. USA: FCC, ‘In the matter of Protecting and Promoting the Open Internet’, Report and Order on Remand, Declaratory Ruling, and Order’ adopted 26 February 2015, available at <<https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-24A1_Rcd.pdf>> at page 5609 at para [21] and FCC, ‘FCC adopts strong, sustainable rules to protect the open internet’, February 2015, available at <https://apps.fcc.gov/edocs_public/attachmatch/DOC-332260A1.pdf>;  
    Europe: European Parliament, REGULATION (EU) 2015/2120 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 November 2015, available at <<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R2120&from=en>> and European Commission, ‘Open Internet’, last updated 20 September 2016, available at <<https://ec.europa.eu/digital-single-market/en/open-internet-net-neutrality>>. [↑](#footnote-ref-75)
76. Communications Consumer Panel, Response to Ofcom Consultation on Net neutrality and traffic Management, available at <<http://www.communicationsconsumerpanel.org.uk/Ofcom%20Final%20Panel%20response%20NN.pdf>> at pp.6-7 [↑](#footnote-ref-76)
77. Optus, Optus Internet Service – Service Description, 27 July 2016, available at <<http://www.optus.com.au/content/dam/optus/documents/about-us/legal/InternetServDesc.doc>> at p.4 at para [2.4]. [↑](#footnote-ref-77)
78. iiNet, ‘Our Customer Relationship Agreement – General Terms’, 5 July 2016, available at <<https://www.iinet.net.au/about/legal/cra/pdf/iiNet-Group-General-Terms.pdf>> p.6 at para [4.8] [↑](#footnote-ref-78)
79. Ry Crozier, ‘Will Australia’s broadband probe expose bottlenecks or just raise prices?’ itnews.com.au, 27 July 2016. [↑](#footnote-ref-79)
80. Ofcom, ‘Ofcom’s approach to net neutrality’, 24 November 2011, available at <<https://www.ofcom.org.uk/__data/assets/pdf_file/0011/50510/statement.pdf>>at pages 15-16. [↑](#footnote-ref-80)
81. We have also addressed issues about network traffic management further in our answer to question 8 and questions 13-17. [↑](#footnote-ref-81)
82. MANRS and IETF Recommended Internet Service Provider Security Services and Procedures, Section Network Infrastructure, <http://www.rfc-editor.org/bcp/bcp46.txt> [↑](#footnote-ref-82)
83. Evidence to Standing Committee on Infrastructure and Communications, Parliament of Australia, Canberra, 5 May 2011, (Mr Buckingham, Chief Financial Officer, iiNet) available at   
    <[http://parlinfo.aph.gov.au/parlInfo/download/committees/commrep/2011-05-05/toc\_pdf/Standing%20Committee%20on%20Infrastructure%20and%20Communications\_2011\_05\_05\_39\_Official\_DISTRIBUTED.pdf;fileType=application%2Fpdf#search=%22committees/commrep/2011-05-05/0001%22](file:///C:\Users\una.lawrence\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\RIE02EIU\committees\commrep\2011-05-05\0001#search=)> at p.9. [↑](#footnote-ref-83)
84. See, for example See for example, Internet Engineering Task Force, Best Current Practice 38, 38 Network Ingress Filtering: Defeating Denial of Service Attacks which employ IP Source Address Spoofing. P. Ferguson, D. Senie. May 2000 (Updated by RFC3704) (Also RFC2827), available at <<https://tools.ietf.org/html/bcp38>> [↑](#footnote-ref-84)
85. ACCC, ‘Exetel compensates consumers following ACCC investigation’, 18 January 2016, available at <<http://www.accc.gov.au/media-release/exetel-compensates-consumers-following-accc-investigation>>. [↑](#footnote-ref-85)
86. Issues Paper, p. 19. [↑](#footnote-ref-86)
87. Zen Internet Limited, ‘No throttling, no squeezing: The Zen approach to Traffic Management’ available at <<https://www.zen.co.uk/newsletters.aspx?page=11415>> [↑](#footnote-ref-87)
88. Vox, 2016, ‘Nest is about to deliberately break one of its own products. That's unfair to customers.’, available at: <http://www.vox.com/2016/4/4/11364566/nest-revolv-bricking> [↑](#footnote-ref-88)
89. Apple, ‘iOS- Home’, <<http://www.apple.com/au/ios/home/>>; Google, ‘Brillo’, available at <<https://developers.google.com/brillo/>>. [↑](#footnote-ref-89)
90. IoT Device Maker Vows Product Recall, Legal Action Against Western Accusers https://krebsonsecurity.com/2016/10/iot-device-maker-vows-product-recall-legal-action-against-western-accusers/ [↑](#footnote-ref-90)
91. Internet Census 2012 (Carna botnet) http://internetcensus2012.bitbucket.org/paper.html [↑](#footnote-ref-91)
92. US-CERT Alert (TA13-175A) Risks of Default Passwords on the Internet https://www.us-cert.gov/ncas/alerts/TA13-175A [↑](#footnote-ref-92)
93. Telstra, ‘Telstra to launch smart home platform’, 22 June 2016, <<http://www.telstra.com.au/aboutus/media/media-releases/telstra-to-launch-smart-home-platform.xml>.> [↑](#footnote-ref-93)
94. Telsyte, Australian IoT @ Home Market to reach $3.2 billion by 2019 embedding smart technology into everyday life, 10 August 2015, available at <<http://www.telsyte.com.au/announcements/2015/8/10/australian-iot-home-market-to-reach-32-billion-by-2019-embedding-smart-technology-into-everyday-life-1>> [↑](#footnote-ref-94)
95. Telstra, ‘Telstra to launch smart home platform’, 22 June 2016, <<http://www.telstra.com.au/aboutus/media/media-releases/telstra-to-launch-smart-home-platform.xml>> [↑](#footnote-ref-95)
96. Jamison Methods for increasing competition <http://regulationbodyofknowledge.org/wp-content/uploads/2013/03/Jamison_Methods_for_Increasing.pdf> [↑](#footnote-ref-96)
97. ACCC Communications Report 2014-2015. Pg 23, 24, 29, 30 [https://www.accc.gov.au/system/files/ACCC%20Telecommunications%20reports%202014%E2%80%9315\_Div%2011%20and%2012\_web\_FA.pdf](https://www.accc.gov.au/system/files/ACCC%20Telecommunications%20reports%202014–15_Div%2011%20and%2012_web_FA.pdf) [↑](#footnote-ref-97)
98. ACCC Communications Report 2014-2015 [↑](#footnote-ref-98)
99. How much extra does regional Australians pay for the nbn. <http://www.lifehacker.com.au/2016/10/how-much-extra-does-regional-australia-pay-for-the-nbn/> [↑](#footnote-ref-99)
100. <http://www.canstarblue.com.au/phone-internet/internet/nbn-providers/amaysim-targets-nbn-ausbbs-takeover/>

     <http://www.canstarblue.com.au/phone-internet/vodafone-joins-nbn-bandwagon/> [↑](#footnote-ref-100)
101. Baba Shiv, Ziv Carmon & Dan Ariely. 2005. Placebo effects of marketing actions: consumers may get what they pay for. <http://people.duke.edu/~dandan/webfiles/PapersPI/Placebo%20Marketing%20Actions.pdf> [↑](#footnote-ref-101)
102. ACCAN has been contacted by a range of consumers served by SBAS and LBAS networks. Some examples previously given in December 2015 submission to SBAS. <https://accan.org.au/our-work/submissions/1168-superfast-broadband>. We have also commented in the media in response to end user concerns. <http://www.smh.com.au/business/consumer-affairs/poor-internet-service-can-break-a-real-estatel-deal-wentworth-point-agent-says-20161013-gs1b7x.html?utm_source=newsletter_91&utm_medium=email&utm_campaign=webnews355> [↑](#footnote-ref-102)
103. Table 1.1 of SBAS declaration inquiry. https://www.accc.gov.au/regulated-infrastructure/communications/superfast-broadband-access-service-declaration-inquiry [↑](#footnote-ref-103)
104. ACMA, 2015, Australians Get Mobile Research Snapshot. <http://www.acma.gov.au/theACMA/engage-blogs/engage-blogs/Research-snapshots/Australians-get-mobile> [↑](#footnote-ref-104)
105. <https://www.anao.gov.au/work/performance-audit/award-funding-under-mobile-black-spot-programme> [↑](#footnote-ref-105)
106. Apple, ‘Apple SIM’, available at <<http://www.apple.com/au/ipad/apple-sim/>>; Apple, ‘iPad - View countries with supported LTE networks’, available at <<http://www.apple.com/ipad/LTE/>>. [↑](#footnote-ref-106)
107. <http://www.optus.com.au/shop/broadband/home-wireless-broadband> [↑](#footnote-ref-107)