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| Broadband Speed Claims |
| Discussion Paper |
| July 2016 |

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The ACCC has released this discussion paper to assist interested parties in making submissions to the ACCC about broadband speed claims. The paper contains:

* information about how to make submissions and key dates for the consultation process
* details about what will be covered in the consultation, and
* issues on which we are seeking comment.

## Timetable

The key dates for the 2016 consultation are outlined below.

|  |  |
| --- | --- |
| 26 July | Consultation on the discussion paper commences |
| 25 August | Due date for submissions |
| November/December | (Anticipated) ACCC to communicate the outcomes of this consultation |

## Submissions and contacts

Submissions and enquiries about this consultation can be made to [broadbandperformance@accc.gov.au](mailto:broadbandperformance@accc.gov.au)

If you have a complaint or enquiry about broadband speed claims, please contact the [ACCC Infocentre](https://www.accc.gov.au/contact-us/contact-the-accc/general-enquiry-form).

Further contact details are available on the ACCC’s [website](http://www.accc.gov.au/contact-us).

# Executive Summary

Important changes are taking place in markets for broadband and related services. Significant investments are being made in next generation access networks which allow the provision of retail broadband speeds in excess of 25 megabits per second (Mbps) on those networks. New devices and applications have emerged which utilise the higher speeds and capacity that next generation access networks make possible. Many more consumers are looking to acquire high speed broadband services and capacity.

However, not all retail fixed broadband services will support high speeds, and some will support higher speeds than others. This can either be due to limitations in the access network, or because the retail service provider (RSP) has not developed its own networks and products so as to utilise the high speeds potentially available, or a combination of these factors.

Notwithstanding these developments, RSPs have typically been slow to provide information that readily identifies the performance characteristics of their fixed retail services and plans, including speed of service. Rather, RSPs have continued to emphasise the prices and download quotas that they offer, and have restricted descriptions of the speeds that their retail broadband services support to imprecise qualitative statements (for example, ‘quick’, ‘fast’ and ‘boost’).

Further, some RSPs are stating the product specification for the underlying fixed access service (for example, ‘up to’ 100/40 Mbps) without further explanation. This might misrepresent the speeds that the retail broadband service can consistently achieve, especially during peak periods when most consumers will want to use the service.

In other countries, regulators have taken steps to address gaps in consumer information, to minimise the potential for consumers to be misled about broadband speed and to encourage the provision of accurate speed information to consumers.

Consumers are entitled to expect clear and accurate information about the performance characteristics of services they have purchased or are considering switching to. We are seeking to promote better industry practices in the evolving broadband market, including the provision of accurate, meaningful information to consumers about broadband speed. We believe this will support competition and consumer outcomes in the broadband market and will minimise the need to consider enforcement action in relation to broadband speed issues.

Through this consultation we are seeking to better understand the factors that are inhibiting RSPs from informing consumers of the speeds that their retail fixed broadband services support in practice. We are seeking views about how these factors can potentially be overcome so that consumer search costs can be reduced and retail broadband markets operate more efficiently.

We are also interested in views about whether similar issues are arising in the marketing of mobile broadband services. This consultation focuses on speed claims and performance information relevant to retail fixed broadband services, as the volume of data downloaded over fixed networks is significantly larger than on mobile networks (1.3 million terabytes, compared to 110 000 terabytes).[[1]](#footnote-1) However, noting that demand for mobile data increased by 35 per cent during 2014-15 and is anticipated to continue to grow as services move to 5G, some of the issues and next steps outlined in this paper are likely to become increasingly relevant to mobile services.

1. Introduction
   1. ACCC role and objectives

The ACCC’s key objectives include protecting the interests of consumers and supporting fair trading in markets affecting consumers and small businesses.

We seek to achieve this in the following ways:

* Investigating the factors that prevent markets from operating efficiently and identifying how these factors can potentially be overcome to address current and emerging competition and consumer issues.
* Informing businesses about their rights and obligations under the *Competition and Consumer Act 2010* (Cth) (the Act) through engagement, education, the provision of specialised information and providing for the protection of consumers in their dealings with businesses.[[2]](#footnote-2)
* Enforcing the Act, including the Australian Consumer Law (ACL),[[3]](#footnote-3) in circumstances where consumers have been misled or deceived, in line with the *ACCC Compliance and Enforcement Policy*.[[4]](#footnote-4)
  1. Purpose of this consultation

The ACCC considers that consumers should be provided with clear, accurate information about broadband services, including about the speed that an RSP’s products support in practice. The availability of this information assists consumers to make confident purchasing decisions and encourages competition based on performance as well as price.

On the other hand, a lack of accurate consumer information about broadband performance increases the likelihood that consumers could be misled about (or misunderstand) the quality and capabilities of the services that are available to them. This limits a consumer’s ability to select the most appropriate service for their needs and chills incentives to compete.[[5]](#footnote-5)

In other countries, these issues have been addressed directly by regulators, including through rules or codes that encourage or require the use of comparable or standardised consumer information about broadband speed and performance.

In this consultation, we are looking to refresh and build upon our previous work in this area. Our most recent consultation about broadband speed issues was in 2011 and led to the provision of guidance on speed claims.[[6]](#footnote-6) The 2011 Information Paper provides guidance about the marketing of the expanding range of broadband products supported by hybrid fibre-coaxial (HFC) and Optical Fibre networks. The key position outlined in the 2011 Information Paper was that ‘up to’ speeds should not be presented in headline marketing claims, and instead these must represent ‘attainable speeds’.[[7]](#footnote-7)

Since 2011, some important technology and marketing developments have emerged, including the move to Next Generation Networks (NGNs).[[8]](#footnote-8) There is also currently a lack of accurate, comparable consumer information about broadband speeds. This discussion paper seeks to identify the factors that are currently preventing RSPs from providing accurate information about the performance of their broadband services and how these could best be overcome. In particular, it seeks to identify the opportunities that the move to next generation access networks could provide in this regard. More particularly, this paper seeks to address the following issues:

* What are the impediments to RSPs moving to make more meaningful speeds and performance information available to consumers, including the speeds that the RSP’s retail products support during peak periods? How could these impediments be overcome so that consumers will receive meaningful information?
* How can information about service performance and speed at different times (including peak usage periods) be presented in a way that enables consumers to make informed choices?
* Does the move to next generation access networks provide opportunities for RSPs to more accurately assess the speeds that their services can support in practice?
* What tools are available to RSPs to monitor their network performance and do these tools provide a sound basis for clear and accurate representations of the speeds that the RSP’s retail broadband services will support, including in peak and off peak periods?
* What arrangements can RSPs implement to minimise the impact where an individual service will not meet the represented retail product specification that is generally available to users of the service? How do these arrangements factor in the need to comply with the requirements of the ACL?

The focus for this consultation is fixed broadband speed claims and performance information, however we have included some information and questions about mobile broadband performance at Issue 8.

The majority of this paper is written for specialist and technical audiences including industry participants, representative bodies and other stakeholders. We are also interested in hearing consumer views about broadband speed claims issues. A summary of issues along with consultation questions for individual consumers are available on the [ACCC Consultation Hub](https://consultation.accc.gov.au/).

### Defining broadband ‘speed’ and other performance factors

‘Speed’ is generally defined as a measurement of both the data rate downstream and upstream experienced by the end-user consumer. For fixed broadband services, downstream speed is the capacity of a user’s broadband connection to download data (e.g. a web page, music file, etc) from the internet. Higher end-to-end speeds are generally more desirable, as they allow users to retrieve data more quickly (up to the maximum speed required to operate the particular application), which is important for certain high-data rate applications (such as video streaming services). Upstream speed refers to how fast data can be transmitted over the home broadband connection to the Internet.

Considering ‘speed’ performance in the context of other factors that influence the quality of a service (e.g. stability, packet loss, latency and DNS failure rates) can assist in further understanding the overall performance of a particular broadband service.[[9]](#footnote-9)

For the purposes of this discussion paper, ‘speed’ includes the range of factors that can affect a consumer’s broadband experience. Our preliminary view is that when RSPs make speed representations to consumers those representations should relate to the performance of the connection from the consumer premises (excluding in home devices unless provided by the RSP) to the RSP’s network. This includes performance of the service when accessing popular content for example from Google, YouTube, Netflix etc but would not include performance when accessing content via international links or where impacted by the Internet backbone beyond the RSPs’ direct control. References to ‘speed’, ‘service performance’ and ‘performance characteristics’ in this paper are different ways of expressing network performance factors which may be important to consumers.

We note that historically ‘speed’ has been used by RSPs to describe the data rates downstream and upstream performance of their services. ‘Speed’ is also commonly used by consumers and it is how data rates are generally referred to in international broadband monitoring programs.[[10]](#footnote-10)

As part of this consultation, we are seeking views about the most appropriate way to define the term ‘speed’ in order to capture the types of performance measures and issues discussed in this paper, including comments on the definition above.

* 1. Marketing of broadband services

In 2011 we observed that the increasing complexity in broadband pricing, service structure and marketing meant consumers were more reliant than ever on clear, accurate information to assist their purchasing decisions. We noted that an absence of accurate information can distort market outcomes and prevent consumers from finding the best deal. We also noted that increasing product complexity had not been accompanied by improved consumer information.[[11]](#footnote-11)

We consider these observations remain valid and that there are currently three main areas for improvement in the presentation of broadband speeds and performance information to consumers:

* *Headline representations* – headline claims typically focus on data allowance/service inclusions and price, and generally do not state the service speed that the advertised broadband plan supports in practice. Where headline claims do refer to speed of service, they typically use vague or qualitative performance descriptors such as ‘fast’ or ‘high-speed, or visual representations (rather than specific speed ranges)
* *Product descriptions and speed tier offers* – some RSPs have moved to advertise broadband services on the basis of speed ‘tiers’, usually on an ‘up to’ basis. This is generally noted in detailed product information (that is, not in headline claims). For example, it appears that some RSPs are relying on the speed tiers used in NBN Co’s product descriptions when marketing the retail services that the RSP provides over the NBN. However RSPs are not currently translating the wholesale speed tier information and presenting it to consumers in a way that will allow consumers to understand the speeds that the associated retail services will provide
* *Comparable performance information* – currently, marketing information that RSPs make available does not support consumers in assessing and comparing the broadband products potentially available to them. The absence of an independent and verified information source to allow consumers to make these comparisons independent of RSP marketing materials exacerbates this problem.

Where concerns about broadband speed claims arise, we currently consider whether to take action to enforce compliance with the provisions of the Act on a case-by-case basis, with reference to the factors outlined in the *ACCC Compliance and Enforcement Policy*, the ACCC’s corporate priorities and relevant ACCC guidance.

Through this consultation, we are seeking to encourage RSPs to improve the information that they provide to consumers. We consider this will also improve compliance with the ACL. We are also looking to further develop our approach to addressing problematic speed claims where they do arise. This includes considering:

* how standard information disclosure and presentation may assist consumers to understand the performance characteristics of their broadband service and to compare different offers in the market
* appropriate tolerances that could deal with isolated performance issues arising from time to time (for example, where relatively few consumers are affected by an isolated event or performance issue and the RSP takes prompt and all reasonable measures to mitigate the impact on those consumers), and
* appropriate responses where broadband speed marketing information presented to consumers proves to be inaccurate or misleading (for example, where an RSP is typically unable to deliver the represented service speed and/or has failed to take reasonable steps to assist consumers affected by this).

Following this consultation, the ACCC may further consider an appropriate regulatory framework for addressing these issues.

* 1. Next generation access networks

The emergence of next generation access networks has further expanded the range of fixed broadband and related services and therefore consumers will potentially need to consider different information in order to make purchasing decisions. This reflects that more consumers are looking to acquire high speed broadband plans as these access networks have become available in order to use new devices and applications that require higher speeds and capacity.[[12]](#footnote-12)

The range of underlying broadband technologies has been expanding as the rollout of fixed services using fibre-based technologies (i.e. FTTP, FTTN, FTTB and HFC) continues.[[13]](#footnote-13) Next generation access networks deliver ‘superfast’ broadband access services, generally defined as broadband services capable of providing a download transmission data rate greater than 25 megabits per second.[[14]](#footnote-14)

These developments have been accompanied by an increasing focus on the speed capabilities of services delivered over next generation access networks, and heightened consumer expectations about broadband speeds on those networks.[[15]](#footnote-15)

Consumer demand for data and content services is increasing, including for popular audio-visual streaming services (such as subscription video on demand (SVOD) services).[[16]](#footnote-16) These services require minimum service speeds to deliver video quality (e.g. standard definition, high definition or ultra-high definition).[[17]](#footnote-17) It is generally anticipated that the range of data-intensive applications requiring minimum service speeds will continue to expand, including voice over internet protocol (VoIP) and over-the-top (OTT) services.[[18]](#footnote-18)

These factors have contributed to the recent growth in network usage, with the demand for data on fixed networks growing by 40 per cent from 0.96 million terabytes (TB) to 1.3 million TB in the 2014-15 year.[[19]](#footnote-19) Increased network traffic evidences positive consumer engagement with technological developments in the market. In line with these developments, we consider that as more consumers transition to next generation access networks and to data intensive services, they will be increasingly reliant on the quality of information about the network performance and speeds that RSPs support.

However, there is currently a lack of comparable information about broadband speed available to consumers and it appears that current marketing of retail broadband services is a growing source of consumer complaint and dissatisfaction. The *2015/16* *Australian Consumer Survey* identifies telecommunications and internet services as the top two areas where consumer problems are likely to arise.[[20]](#footnote-20) Further, consumer problems (including those arising from a failure to initially present accurate consumer information) are costly to resolve for both industry and consumers.[[21]](#footnote-21)

Hence, improving the availability of objective and accurate service performance information in the market for retail broadband services is likely to become increasingly important and beneficial to both consumers and suppliers of high speed broadband services.

* 1. Comparable performance information

The current lack of comparable broadband performance information makes it difficult for consumers to assess and compare offers made by different RSPs, and to select a service that best meets their needs.[[22]](#footnote-22) In some other countries, this information gap has been addressed by a combination of comparator websites, broadband performance monitoring and reporting programs and regulator guidance or action to encourage the presentation of accurate consumer information (including standard disclosure templates).

The ACCC’s proposed Broadband Performance Monitoring and Reporting (BPMR) Program would complement steps to address issues outlined in this discussion paper. A BPMR Program involves testing services and presenting verified performance information to enable consumers to compare speed offers and make more informed purchasing decisions.[[23]](#footnote-23) This also enables RSPs to verify their own performance when seeking to make claims, as the proposed program would provide visibility of the performance of competitors and encourage greater performance-based competition.

There is evidence that overseas monitoring programs have encouraged industry participants to provide performance information to the market and that RSPs have come to rely on program data when making product offers.[[24]](#footnote-24)

Some information about broadband performance is currently being provided to the market in the form of product-specific speed ‘league tables’. These websites rank RSPs according to the speed at which they may be able to deliver certain data-intensive services such as video streaming. In other cases, league tables rank RSPs according to the results derived from consumer-led software-based testing.[[25]](#footnote-25)

Over time, some RSPs have moved to rely on rankings in advertising broadband services. Reliance on league table information signals an appetite among consumers and industry participants for comparable broadband performance information, including about speed of service. However, there is an ongoing need to ensure league table and other comparator information is presented in a way that assists consumers to make informed decisions based on the speeds RSP services can support in practice.

* 1. International experience

In some other countries, regulators have recently moved to address speed claims issues using different tools to encourage or require the provision of speed information to consumers. Regulators have adopted or supported industry codes, rules and standard product disclosure templates to encourage presentation of information about service speed in a way that assists consumer decision-making.

In the United Kingdom, eight principles currently guide how RSPs present consumer information about broadband speeds throughout the life of a retail contract. RSPs have voluntarily agreed to a requirement that allows a consumer to terminate the contract without charge where speeds are below the minimum guaranteed access line speed outlined in the point of sale information.[[26]](#footnote-26) Under the UK Code, RSPs need to ensure that the access line speed information provided during the sales process is informed by a speed range which is equivalent to the access line speeds achieved by the 20th and 80th percentiles of the RSP’s similar consumers (i.e. consumers with similar line characteristics and who are on broadband packages of the same headline speed the consumer enquiry is about).[[27]](#footnote-27)

Ofcom is currently considering whether automatic consumer redress should apply when broadband services fall below expectation, as part of a number of strategies to improve quality of service in the UK communications sector. Ofcom is consulting on proposals for new automatic compensation rules which would ‘protect consumers from the negative impacts that quality of service problems can cause and to incentivise providers to deliver to higher standards.’[[28]](#footnote-28) Ofcom has noted that consumers’ reliance on their communications services for a wide variety of activities means that the negative impact of lower quality service can be significant (including time and inconvenience of having to organise a repair, and arrange for temporary solutions). The introduction of compensation rules would ensure those consumers directly affected by service quality issues will receive financial recognition and redress for the adverse impact caused.[[29]](#footnote-29)

Similarly, the United States Federal Communications Commission (FCC) has recently implemented measures to address speed claims issues. The FCC’s legally enforceable Open Internet Transparency Rule (the Rule) encourages RSPs to present information to enable consumers to make an informed decision about their broadband service.[[30]](#footnote-30) The FCC developed an information ‘label’ template that, where it is used by RSPs in marketing practices, can evidence compliance with the Rule.[[31]](#footnote-31) The template includes information on price per month, contract length and fees, as well as performance characteristics such as download speeds, upload speeds, latency and packet loss.

In Europe, the Body of European Regulators for Electronic Communications (BEREC) has issued draft guidance about speed of service representations.[[32]](#footnote-32) The guidelines provide:

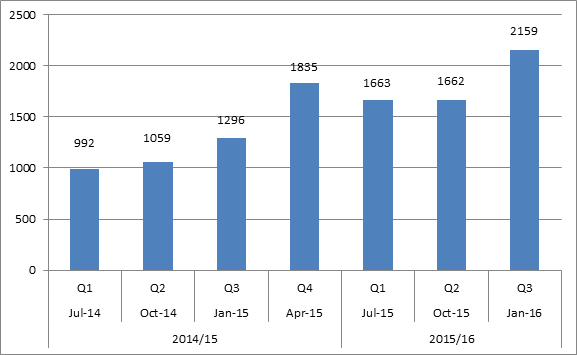
* Internet Service Providers (ISPs) may only offer specialised services (i.e. specific content, applications or services) where the ISP has sufficient network capacity to provide those services in addition to the standard internet service provided. Where insufficient capacity is available, and use of specialised services would degrade the network, ISPs must refrain from offering them (Article 3(5))
* all contracts between ISPs and end-users for internet services must include a clear and comprehensible explanation of the minimum, normally available, maximum and advertised download and upload speed of the internet service (Article 4(1)(d)), and
* a monitoring regime whereby the national regulatory authorities closely monitor and ensure compliance with the above. In addition, the national regulatory authorities are to publish reports on an annual basis and provide those reports to BEREC (Article 5).
  1. Current consumer issues

In Australia, there is evidence of growing consumer complaints and confusion about broadband services and data speeds. The Telecommunications Industry Ombudsman (TIO) has reported that complaints about slow data speed are the highest growing area of consumer complaint, with complaints increasing 56.8 per cent in the October-December 2015 quarter compared to the same time in 2014.[[33]](#footnote-33) More consumers contacted the TIO about slow data speeds, unusable internet services and connection problems than about any other issue in all new complaints during the January-March 2016 quarter.[[34]](#footnote-34)

According to the TIO, consumers with issues about slow data speeds have generally reported that their internet slowed during peak hours; they had been long-term customers and their internet had recently started to slow down; or they were not getting the speeds they were promised at the time they signed up for their service.[[35]](#footnote-35) In April 2016, the TIO noted some examples of the types of internet consumer complaints and concerns it has conciliated:

* "…a representative said it would take five to seven working days to connect the internet. Six weeks later nothing was done…"
* "… I have raised this complaint several times since the beginning of this year with my provider. I am paying for a service for which I am getting half the promised speed and unreliable connection…"
* "… our internet connection dropped out or ceased to exist regularly and we made multiple calls to tech support, had visits by technicians, replaced modems, paid excess data charges on our mobile phones or had to rely on our neighbours' kindness to use their wi-fi…".

Table – Slow data speed complaints**[[36]](#footnote-36)**



1. Consultation process

We encourage industry participants and other interested parties to consider and make submissions on the issues set out in this discussion paper.

* 1. Submissions

This discussion paper seeks submissions on a number of issues. However, interested parties are not expected to provide submissions on matters which are not relevant to them or which they are not in a position to comment on.

We seek written submissions on the issues raised in this discussion paper by **no later than Thursday 25 August 2016**.

We prefer to receive electronic copies of submissions, either in PDF or Microsoft Word format which allows for the submission text to be searched. Please contact us regarding any questions you have about this consultation at [broadbandperformance@accc.gov.au](mailto:broadbandperformance@accc.gov.au)

Please email submissions to: [broadbandperformance@accc.gov.au](mailto:broadbandperformance@accc.gov.au)

If you have a complaint or enquiry about broadband speed claims, please contact the [ACCC Infocentre](https://www.accc.gov.au/contact-us/contact-the-accc/general-enquiry-form).

* 1. Confidentiality of submissions

To foster an informed and consultative process, all submissions will be considered as public submissions and will be posted on the ACCC’s website. Interested parties wishing to submit commercial-in-confidence material to the ACCC should submit both a public and a commercial-in-confidence version of their submission. The public version of the submission should clearly identify the commercial-in-confidence material by replacing the confidential material with an appropriate symbol or ‘c-i-c’.

The fewer confidentiality restrictions placed on submissions to the discussion paper, the more easily we can test information provided and reach accurate conclusions about the market. Therefore, we ask that information you claim confidentiality over must be genuinely of a confidential nature and not otherwise publicly available. We request that you provide reasons in support of your claim, to assist us to better understand your claim and assess the information you provide.

We are committed to treating confidential information responsibly and in accordance with the law. Where we are provided with confidential information, we will, to the extent reasonably possible, seek to protect the confidentiality of that information. In some circumstances we may be legally required to produce confidential information. For example, we may be required to disclose information that is subject to a confidentiality claim pursuant to a court order or subpoena. If this occurs, we will endeavour to notify and consult with you about the proposed release of your information and measures (such as confidentiality orders) that may be taken to protect that information. It is also important to note that we may share confidential information internally with ACCC and AER staff and with our external lawyers and consultants.

For further information on the ACCC’s treatment of confidential information, please refer to the ACCC/AER Information Policy available on the [ACCC website](https://www.accc.gov.au/publications/accc-aer-information-policy-collection-and-disclosure-of-information).

1. Issues for consultation

This section identifies eight issues relevant to the presentation of consumer information about broadband speeds. We provide our preliminary understanding and views of key issues including: network management and opportunities to accurately assess and present information about speeds on next generation access networks; the impact of peak demand on available speeds; the presentation of premium speed products;;the impact of traffic prioritisation, data intensive applications and services, and how best to manage isolated cases of poor service performance. We also identify issues and questions about mobile broadband speed representations.

Each issue is accompanied by a set of questions seeking information about current issues and identifies where there may be scope to improve practices. We welcome responses to these questions in addition to broader information from RSPs, access network owners/operators, consumer representatives and other interested parties.

## Issue 1 – Network management and monitoring services delivered on NGNs

The significant investment in next generation access networks has been designed to boost network capability to provide high speed broadband.[[37]](#footnote-37) The network management, investment and configuration decisions made by access network owners/operators and RSPs have a direct bearing on the performance the RSP’s network is able to support, including during peak demand periods, in order to achieve the best value from this investment.

We understand that industry participants use a range of network management tools to assess the speed their services can support in practice. RSPs have access to different sources of performance information based on their own network management and monitoring systems, as well as information provided by the access network operator. This may include product specifications for the underlying access service (for example, NBN speed tiers) and pre and post service activation speed estimation and testing tools. Next generation access network technologies are also likely to provide more stable performance. Combined, these factors should increase certainty and predictability of overall network performance, including speed of service. It should also enable RSPs to better anticipate consumer demand and accurately assess their speed of service.

Broadband performance and speed experienced by end-users is known to be affected by a range of factors, and responsibility for or control over these factors is shared variously between access network owners/operators, RSPs, content service providers and other third parties and consumers.

In this regard, we would like to understand the network management practices that access network owners/operators, RSPs and content service providers use to monitor their networks and how these have evolved in respect of NGN services. We are also interested in understanding the measures available to these parties in order to respond in a timely manner where their networks are not delivering the service performance which consumers were led to expect.

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| Questions   1. How do RSPs, content service providers and access network owners/operators currently manage and monitor their fixed broadband network and speed performance? 2. When issues are detected through performance monitoring or in this context, what are the key measures available to improve network performance and therefore speed of service? What timeframes are needed to implement any such measures? 3. Does the move to next generation access networks provide opportunities for RSPs to better manage their networks and more accurately assess the service performance and speeds that they deliver in practice? 4. What information is available to RSPs to assist them in making accurate performance claims in their marketing materials and at point of sale? 5. Is information generated through network monitoring and diagnostics used by RSPs to inform speed claims made to consumers? If so, how? 6. Is information on expected service performance available to RSPs when establishing a particular retail service? Is information on actual service performance available to RSPs shortly after service activation? How is this information provided to consumers or otherwise taken into account by RSPs when communicating with consumers? 7. What arrangements can RSPs implement to minimise the impact where an individual service will not meet the represented retail product specification that is generally available to users of the service? Are the consumers of these services offered the opportunity to exit their contracts without penalty? |

## Issue 2 – Presentation of speeds information to consumers

As noted above, a key focus of this consultation is to identify how marketing practices can be improved so that consumers have more meaningful and comparable information about the performance characteristics of fixed broadband retail services when making purchasing decisions. This will reduce consumer search and transaction costs, and facilitate RSPs competing on performance during an important period of market transition.

This section outlines issues for consideration relevant to the presentation of consumer information, including any impediments to RSPs presenting meaningful speeds information to consumers that complies with the ACL.

### Complying with the Australian Consumer Law

We administer compliance with the ACL. The ACL establishes a range of legal protections that promote fair trading by businesses and provides for the protection of consumers in their dealings with businesses, including ensuring consumers are not misled when purchasing goods and services.[[38]](#footnote-38) We can use a range of tools to address ACL issues, including providing guidance to industry to assist compliance, accepting court enforceable undertakings, issuing infringement notices and seeking court-based outcomes.

The requirements of the ACL need to be taken into account when industry participants consider how best to present broadband speeds information to consumers. For example, where key service information is prominently displayed and communicated to consumers, this can protect consumers from being misled or misunderstanding the type of service they are purchasing.

Ensuring compliance with the ACL can also avoid or prevent consumer complaints and confusion, as well as high unnecessary costs to businesses and consumers (as noted in the *Australian Consumer Survey)*.[[39]](#footnote-39) This has a range of direct benefits where practices encourage consumers to have confidence in an evolving market.

### Headline representations

The next generation access network environment is likely to provide opportunities for RSPs to articulate the broadband speeds their products can support in practice and therefore reduce the incentives to state or rely on theoretical or aspirational speed targets. However, currently, headline advertising about fixed broadband services is generally not presenting information about the speed the RSPs’ products support in practice. Where headline advertisements do describe components of the service, these are generally focused on data/inclusions and price (noting the shift to focus on price and data inclusions may have been influenced by increasing consumer demand for data).

Current marketing materials tend to describe speed of service using vague or qualitative performance descriptors such as ‘fast’, ‘fastest’ or ‘high-speed’, or use visual representations such as athletes or animals (rather than state specific speed ranges), without further explanation.

Practices of this kind create an impression that consumers will receive a ‘fast’ service. Once the consumer is online, the value of that proposition cannot be tested against the original offer. This may give rise to consumer complaints, confusion and frustration. It also limits the incentives for RSPs to engage in performance-based competition.

### Product descriptions and ‘speed tier’ offers

Currently, some RSPs are providing limited information about speed of service in their retail product descriptions. In some cases this information is used to describe how performance may be limited by a range of factors (including those set out in the ACCC’s 2011 guidance, for example at paragraph 2.22). In other cases, RSPs are moving to offer broadband services to consumers on the basis of the NBN wholesale speed ‘tiers’, usually on an ‘up to’ basis. While these developments provide consumers with some information, reference to the product specification for the underlying access service may misrepresent the speeds that the retail broadband service can achieve, especially during peak usage periods.

Underlying access services are specified in different ways. For example, NBN Co offers wholesale fibre technology products to RSPs generally on 12Mbps download/1 Mbps upload, 25/5Mbps, 50/20Mbps and 100/40Mbps speed ‘tiers’.[[40]](#footnote-40) As these speed tiers represent a wholesale product offered to RSPs on an ‘up to’ basis, they may be considered service speed ‘limits’ or theoretical maximum achievable speeds across the underlying access service – not necessarily the speed of the retail broadband service. Using wholesale product information in communications with consumers may have the potential to misrepresent the speeds that the retail broadband services can achieve, particularly during peak times.

As noted in Issue 1, various network performance factors can affect speed, including RSP-controlled factors (e.g. RSP network investment and management). This means wholesale speed tiers do not translate directly to the speed the RSP’s product supports.

### Options for improving presentation of information

We are interested in identifying the best means by which to address the current gaps in consumer information about broadband performance. Steps need to be taken to ensure information is available to consumers to assist them in making properly informed purchasing decisions, and to ensure changing market practices align with the ACL requirements while promoting competition and consumer outcomes.

We are therefore seeking views about how RSPs could reasonably improve the information that they provide. In examining ways to encourage improved consumer information, it is likely that we will consider how these improvements can be adopted across the industry at the same time. We recognise that some RSPs may seek to make proactive improvements to information practices as a result of this consultation, whereas others may consider there is competitive detriment in being a ‘first mover’. We are therefore interested in views about how positive changes can be affected in a smooth and timely manner to encourage improved marketing and information practices across the industry.

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| Questions   1. What are the impediments to RSPs making more meaningful speeds information available to consumers, including the speeds that the RSP’s retail products support on fixed services during peak periods? 2. Do RSPs consider they need additional information/support from access network owners/operators to effectively communicate broadband speed information to consumers? 3. What aspects of the RSP service should be the basis of performance and speed claims? For instance, should RSP claims be limited to the service delivered into the premise (excluding in building networks operated by the end-user)? Should claims be based on the performance of actual end-user services and/or on network testing performed using domestic/international test servers? 4. How could impediments be overcome so that consumers will receive meaningful speeds information? 5. Could a standard product disclosure template or similar information tool assist RSPs to present information? If so, what sort of information should be included in the template so that it is comparable by consumers? 6. Which performance measures would be most appropriate for the provision of more accurate performance information to consumers? Should ‘speed’ remain the focus, or should the approach be broadened to include other measurable performance factors? 7. What strategies could be adopted to ensure any changes to the way that RSPs present speeds information to consumer are implemented at the same time? |

## Issue 3 – Peak period demand

Broadband performance during peak usage times is a particular concern for consumers, as shown by TIO complaint data.[[41]](#footnote-41) There is currently a strong likelihood that broadband service performance and speeds will deteriorate during peak usage times (generally between 7-11pm), as demonstrated by the ACCC’s Pilot Broadband Performance Monitoring and Reporting Program (the Pilot).[[42]](#footnote-42)

Peak time performance can be impacted if the underlying networks used to deliver the service are not provisioned to meet the significantly higher demand that occurs in these times. If this is the case, services which were operating well will slow down and become less reliable as networks become congested.

The underlying reasons for poor broadband service in peak periods can either be transitory or entrenched. In some cases, it may be due to an unexpected event such as a systems update (e.g. iOS/Windows) causing a demand spike, or an unscheduled network outage that limits the capacity of the network for a relatively short period. In other cases it may be a regular occurrence and stem from a failure by RSPs, network operators or owners to invest in sufficient network capacity or to appropriately manage the capacity that is available in the networks over an extended period.

As such, it appears that the presentation of clear, accurate information about expected peak period service performance and speeds in particular will assist consumers to select the most appropriate service for their needs.

However, it appears that RSPs are typically not providing information concerning whether their broadband services are likely to be impacted during peak periods. It follows that RSPs are not providing an indication of the speeds that end-users of their services could reasonably expect during these periods.

Consequently, we are interested in understanding the range of ways RSPs can provision and monitor their network to meet demand during peak periods and use this information to advise consumers about the service performance and speeds that users of their services could expect during peak periods.

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| Questions   1. Do RSPs design and manage their networks and fixed services to deliver the same service performance and speeds during both peak and off peak periods? Does this differ by service/plan? 2. Do RSPs provide information to consumers about whether their services are likely to be impacted during peak periods? What representations are made to consumers in this regard? 3. What tools are available to RSPs to monitor their services during peak periods? Do these tools and associated information provide a sound basis for RSPs to make reliable representations to consumers about the performance of their services during peak and off peak periods respectively? 4. How do RSPs manage complaints and enquiries from consumers about peak speed problems? |

## Issue 4 – Premium speed products

Currently, most retail broadband providers offer a range of broadband products of increasing speed to consumers using next generation access networks. The higher speed products are generally marketed on the basis that they are ‘top of the range’ products offering faster speeds for a higher price.

We have observed maximum speeds for these offers are sometimes significantly higher than the basic speed product (for example, some premium speed products are marketed as being capable of delivering more than eight times the speed of the lowest speed or cheapest product offered by the same RSP).

With the number of broadband consumers using premium speed products anticipated to grow as more households connect to NGN services, it will be important to ensure RSPs offering these services can support them in practice and that consumers have clear and accurate information about the nature of the products.[[43]](#footnote-43)

More particularly, consumers might elect to pay for a premium speed product on the basis of their anticipated broadband needs, or move up to a premium product after experiencing problems on a lower price service. In either case, consumers are choosing to pay more on the expectation that they will receive higher speeds. One area of specific concern would be if during busy periods all services (basic and premium) offered by the RSP reduce to the same or a similar level of performance without this having been clearly disclosed to the consumer.

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| Questions   1. Is it possible for RSPs to distinguish traffic on their fixed networks to prioritise premium speed services or otherwise differentiate service levels by service/plan type, particularly during busy hours? 2. What tools do RSPs use to ensure consumers who sign up for premium speed services receive a higher speed as a consequence of paying for a more expensive service? 3. Do RSPs have measures in place to ensure that consumers are not encouraged to take up more expensive services (to address network congestion problems on basic services) if the premium service will also be affected by network congestion problems? |

## Issue 5 – Prioritisation of network traffic

As more data intensive uses of the internet become available, RSPs may move to prioritise network traffic to improve the consumer experience of certain applications and to enable targeted marketing of those services.[[44]](#footnote-44)

For example, prioritising traffic for video streaming applications would likely provide a higher resolution video stream, and reducing latency would improve the experience of online gaming applications. On the other hand, users of data intensive or other applications that are particularly sensitive to network performance which are not prioritised may experience poorer service performance.

Consequently, consumers would likely be interested in understanding how prioritisation practices may affect their use of the service to access individual applications and may make poor purchasing decisions in the absence of this information.

Some applications service providers, such as YouTube and Netflix, have made information available that shows how well their applications are delivered over different broadband networks.

Where concerns about prioritisation have emerged internationally, regulators have taken steps to improve consumer information disclosure.[[45]](#footnote-45) In the Australian context, there may be steps that could be taken to ensure consumers have information about how prioritisation may affect their service.

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| Questions   1. Do RSPs currently prioritise certain network traffic on fixed broadband services? If so, how is network prioritisation communicated to consumers? 2. How do RSPs manage and monitor the performance of their services in respect of delivering prioritised applications and other applications respectively? 3. Would there be any practical impediments to RSPs disclosing to consumers whether they prioritise traffic for certain applications? Is it possible for RSPs to disclose the resulting service quality experienced by users of prioritised applications and how this compares to service performance more generally? 4. Is information made available by applications service providers a reliable basis for consumers interested in those applications to make broadband purchase decisions more generally? |

## Issue 6 – Data intensive applications and services

The recent entry of a number of SVOD products and data intensive applications illustrates the impact data intensive services can have when they become popular with consumers in a short period of time. When the popularity of new applications is unexpected or unanticipated, RSPs and network owners/operators may need to quickly adapt to ensure sufficient capacity to meet demand.[[46]](#footnote-46)

The ACCC’s Pilot BPMR Program observed deterioration in broadband performance during peak use hours. These results covered the period March to May 2015, which coincided with the period when key SVOD products were launched in Australia.[[47]](#footnote-47)

RSPs and network owners/operators are best placed to anticipate and meet changes in consumer demand for content when making offers and facilitating access to new applications. In an evolving market not all changes will be anticipated by market participants. However, the availability of diagnostic and performance measurement and information tools will assist RSPs to forecast and monitor performance issues.

For RSPs, the ability to anticipate and manage demand when data intensive services are introduced, and to provide accurate information to consumers about this, may prevent consumers from being misled about (or misunderstanding) the performance characteristics of the retail services/plans.

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| Questions   1. How do RSPs currently plan for and present consumer information about new data intensive applications and services for fixed broadband services? 2. How is service performance for new data intensive applications monitored? 3. How quickly can RSPs respond to changes in demand when this places pressure on network capacity? How is information about this and any limitations on service performance best communicated to consumers, both upfront and during the life of a retail contract? 4. How do RSPs currently respond to complaints about short term capacity issues where these are related to data intensive applications? Are there any steps that could be taken to improve these practices for future events? |

## Issue 7 – Managing isolated cases of poor service performance

As noted above, in certain circumstances, there is potential for individual services to perform materially below the performance standard that an RSP typically delivers. Over the longer term, the ACCC would expect the move to next generation access networks will promote more ubiquitous service performance being experienced by consumers of broadband services. Notwithstanding this, isolated ad hoc events may arise that adversely impact service performance – it is therefore relevant to consider the impact of these events on consumers and appropriate steps that can be taken to mitigate this.

Various aspects of network evolution and management can cause intermittent or isolated degradation of network performance. For example, there could be an issue with an individual network connection that leads to relatively poor performance of the retail broadband service supplied over it. There may also be the potential for isolated events that affect the RSP’s customer base more generally. Unforeseen demand spikes or unscheduled network outages could lead to broadband services performing materially worse than they normally do for a short period of time.

In this regard, we are interested in what allowances would be reasonable to make for these potential issues, so that RSPs are encouraged to include information about the typical performance of their broadband products in marketing materials. We are also interested in the circumstances in which it would be appropriate for RSPs to be able to make use of these allowances.

In considering these potential tolerances and allowances, it may be informative to take account of overall performance levels. To illustrate, it would appear more reasonable to make an allowance for a temporary decline in performance if an RSP’s performance dipped below the advertised standard for a short period and that RSP was performing well at other times. For example where an RSP has based its marketing information on the level of performance it is currently delivering a very high proportion of the time, including meeting or exceeding represented speeds more than 95 percent of the time during peak hours (for example, between 7-11pm) in a given week.

Similarly, it would appear more reasonable to make allowances where the RSP had in place effective measures to mitigate the impact of poor performance on individual consumers. This could include measures such as the opportunity for the affected consumer to exit their contract without penalty where the underlying cause of the poor performance could not be readily overcome by the RSP. Alternatively or in addition, billing reductions or rebates could be provided to the consumer by the RSP.

Noting these tolerances, we consider there are circumstances in which it would not be appropriate to make allowances and in those circumstances direct action by the ACCC will be appropriate. This would include where an RSP has based their claims on unrealistic or overly optimistic assumptions, or where service problems were recurring or widespread.

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| Questions   1. What thresholds would provide a reasonable basis for performance claims that RSPs use in their marketing materials for fixed broadband services? 2. What measures could RSPs reasonably implement to minimise the impact on consumers should their service not meet the represented retail product specification? 3. What factors should the ACCC consider in determining a level of response to individual instances of broadband services failing to meet the advertised level of performance? |

## Issue 8 – Mobile broadband speeds and representations

The main focus of this discussion paper is fixed broadband speed representations, as consumer demand for data is currently significantly greater on fixed networks compared to mobile networks. However, noting that demand for mobile data continues to increase, we are seeking views about whether similar issues are arising in the use of mobile broadband services and the associated presentation of consumer information about mobile broadband speed.[[48]](#footnote-48)

A range of factors can affect the performance of mobile broadband services, including the network technology and hardware, environmental/external considerations, spectrum holdings and use and network design.

There are a number of ways that an end-user can experience mobile network performance issues. Relevantly for speed representations, an end-user may have access to a mobile network, (i.e. they may have a strong signal), but may be unable to download data at an adequate speed. Therefore, despite having coverage in a particular area, an end-user may still experience poor or slow network performance.[[49]](#footnote-49)

Poor data speeds on a mobile network (where good coverage is available) can be caused by a number of factors. For example, network design may cause performance issues, where there has been inadequate provisioning or poor management of radiofrequency resources. Further, mobile networks can become congested at peak periods. However, we also note that a user may experience poor data rates if they have poor or unreliable network coverage.

In Australia, mobile broadband performance issues were recently examined in response to an increase in consumer complaints. In 2013, the Australian Communications and Media Authority (ACMA) noted an increase in consumer complaints to the TIO about mobile coverage, dropouts and slow data speed.[[50]](#footnote-50)At that time, the ACMA noted that difficulties affecting the mobile phone users may include uploads or downloads operating slower than expected, or sessions unexpectedly timing out.[[51]](#footnote-51) These were observed as ‘intermittent’ issues – that is, consumers may experience slow download speeds in certain locations at times of peak demand for cell availability, but at other times experience a satisfactory service.[[52]](#footnote-52)

In other countries, regulators have taken steps to test and identify mobile broadband performance issues, and to encourage improved business practices. As discussed at Section 1.6, in February 2016 the FCC’s legally enforceable Open Internet Transparency Rule commenced. The ‘nutrition label’ approach covers both fixed and mobile broadband consumer information. Where RSPs implement the nutrition label approach, important information such as price, data cap, data charges, speed, latency and packet loss is provided to consumers.

In the UK, Ofcom has also recently examined and addressed mobile broadband performance issues. In April 2015, Ofcom expanded its performance monitoring program to include smartphone devices using four metrics relevant to the consumer experience of mobile broadband services (download and upload speed, web browsing speed and latency).[[53]](#footnote-53) These tests were designed to compare the performance of 3G and 4G networks on average, by location, and between mobile networks.

In addition, Ofcom’s current consultation on proposed automatic compensation rules captures both fixed and mobile broadband. Ofcom has noted that complaints about poor mobile service quality have risen since 2013, and now account for approximately one in three of the complaints made to UK mobile providers (about both temporary loss of service and service degradation).[[54]](#footnote-54) Ofcom has noted its preliminary view is that mobile network service degradation such as dropped calls or slowing data download speeds are less likely to be suitable for automatic compensation. This is because degradation may be due to consumer location or handset, and location and density of other users in the area or network capacity and coverage. Instead, an automatic right to exit the contract may be considered.[[55]](#footnote-55)

Noting these issues, we are seeking views about current issues in the marketing of mobile broadband speeds.

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| Questions   1. Is it possible to provide mobile broadband performance information, including speed claims, to consumers? What sort of mobile broadband performance information is likely to be helpful to consumers in this regard? 2. How do mobile network operators (MNOs) and mobile virtual network operators (MVNOs) currently manage and monitor their mobile broadband network performance, including for speed of service? 3. When issues are detected through performance monitoring, what are the key measures available to improve network performance and therefore speed of service? What timeframes are needed to implement them, and how is this best communicated with consumers? 4. Are there impediments to MNOs and MVNOs making meaningful speeds information available to consumers? How could any such impediments be overcome? 5. What measures could MNOs and MVNOs reasonably implement to minimise the impact on consumers should their service not meet the represented retail product specification? 6. What factors or tolerances should the ACCC consider in determining a level of response to individual instances of mobile broadband services failing to meet the advertised level of performance? 7. What strategies could be adopted to ensure any changes to way that MNOs and MVNOs present speeds information to consumer are implemented at the same time? |

1. Next steps

We invite interested parties to make submissions on the issues noted in this discussion paper, including any other issues relevant to broadband speed claims and how the presentation of consumer information may be improved. We also invite submissions on the types of compliance principles that may be helpful in guiding the presentation of broadband speeds information.

We will consider responses to this discussion paper and identify steps that can be taken to address the issues outlined above, including by the ACCC, industry participants, government and others.

As noted above, we are seeking to promote the presentation of accurate consumer information about broadband speeds, to support competition and consumer outcomes in the market and to minimise the need for the ACCC to take enforcement action. With this in mind, and noting evidence of high consumer complaints and concerns about broadband speeds, we will examine an appropriate regulatory framework for broadband speed claims. This may address a range of issues including:

* the types of speed claims and performance information likely to be both helpful to consumers and aligned with the requirements of the ACL,
* factors and information industry participants could consider when presenting information about the broadband speeds consumers can reasonably expect on a service, and how this information is best presented,
* steps that can be taken to ensure information about service performance is clearly disclosed to consumers throughout the retail relationship, including in order to avoid omissions that may raise concerns under the ACL,
* factors we are likely to take into account when considering exercising enforcement powers to address misleading or deceptive conduct, false or misleading representations, and other ACL concerns, and
* factors we are likely to consider when deciding to prioritise enforcement action to address certain types of broadband speed conduct, alongside the factors we consider more broadly under the *ACCC Compliance and Enforcement Policy*.[[56]](#footnote-56) In this context, guidance or other information could articulate how cases of unexpected demand, spikes in usage and network outages are best considered, including how reasonable tolerances and allowances may apply.

The tools we may draw on or recommend in order to encourage improved industry practices are broad and may include a standard comparable template for consumer information. This may be accompanied by appropriate guidance to assist industry to implement improved quality of service information.

We anticipate concluding consideration of the issues outlined in this discussion paper during the second half of 2016 and communicating further information about these next steps towards the end of the year.

1. ACCC, *Competition in the Australian telecommunications sector – Price changes for telecommunications services in Australia*, (Competition report), February 2016, p. 1. [↑](#footnote-ref-1)
2. ACCC and AER, *ACCC and AER Corporate Plan 2015-16*, pp. 11-12.]. ACCC, *2016 ACCC Compliance and Enforcement Policy*, February 2016, p. 1. [↑](#footnote-ref-2)
3. The Australian Consumer Law (ACL) is Schedule 2 to the Competition and Consumer Act 2010 (Cth). Sections 18 and 29 of the ACL prohibit conduct in trade or commerce that is misleading or deceptive or likely to mislead or deceive. Section 29(g) of the ACL prohibits a corporation in trade or commerce from making certain representations that goods or services have, amongst other things, performance characteristics, uses, or benefits they do not have. [↑](#footnote-ref-3)
4. ACCC, *Compliance and Enforcement Policy*. [↑](#footnote-ref-4)
5. ACCC, [*The ACCC’s Pilot Broadband Performance Monitoring and Reporting Program – Report on findings*](https://www.accc.gov.au/regulated-infrastructure/communications/monitoring-reporting/broadband-performance-monitoring-reporting-program)(BPMR Report), September 2015, p. 4. [↑](#footnote-ref-5)
6. ACCC, [*HFC and Optical Fibre Broadband “Speed” Claims and the Competition and Consumer Act 2010 – An ACCC Information Paper*](https://www.accc.gov.au/regulated-infrastructure/communications/compliance-anti-competitive-conduct/broadband-speed-claims-information-papers/information-paper-2011) (Information Paper), July 2011. [↑](#footnote-ref-6)
7. Ibid. See also ACCC, [*Optus "unlimited" advertisements declared misleading and deceptive*](http://www.accc.gov.au/media-release/optus-unlimited-advertisements-declared-misleading-and-deceptive), February 2011, News Release number 029/11, <http://www.accc.gov.au>. [↑](#footnote-ref-7)
8. Next Generation Networks or NGNs deliver ‘superfast’ broadband access services (generally defined as broadband services capable of providing a download transmission data rate greater than 25 megabits per second). ACCC, Superfast Broadband Access Service declaration inquiry – Draft decision, (SBAS), November 2015, p. v. [↑](#footnote-ref-8)
9. ACCC, BPMR Report, p. 18-21. See the BPMR Report generally for an overview of the range of measurable factors known to affect broadband performance. [↑](#footnote-ref-9)
10. From a technical engineering perspective, ‘speed’ is not a term that is entirely interchangeable with ‘data rate’ – ibid., BPMR Report, p. 5. [↑](#footnote-ref-10)
11. ACCC, Information Paper, p. 1. [↑](#footnote-ref-11)
12. See ACMA, [ACMA Communications Report 2014-15](http://www.acma.gov.au/~/media/Research%20and%20Analysis/Report/pdf/ACMA%20Communications%20report%202014-15%20pdf.pdf), 9 November 2015, viewed 16 May 2016, <http://www.acma.gov.au/>, p. 52, and ACMA, [ACMA Communications Report 2013-14 Report 1: Australians’ Digital Lives](http://www.acma.gov.au/theACMA/Library/Corporate-library/Corporate-publications/communications-report), March 2015, viewed 16 May 2016, <http://www.acma.gov.au/>, pp. 16-21. [↑](#footnote-ref-12)
13. Fibre to the premises (FTTP), Fibre to the node (FTTN), fibre to the basement (FTTB). [↑](#footnote-ref-13)
14. ACCC, SBAS, p. v. [↑](#footnote-ref-14)
15. Ovum Consulting Group, [*Broadband Experience Scorecard Whitepaper*](http://bes.ovum.com/), 2015, accessed 13 May 2016, pp. 16-17. The [*NBN Co Corporate Plan 2016*](http://www.nbnco.com.au/corporate-information/about-nbn-co/corporate-plan/corporate-plan.html) anticipates 4,395,000 premises activated by the 2017/18 financial year, up from 955,000 in the 2015/16 financial year: NBN Co, [*NBN Co Corporate Plan 2016*](http://www.nbnco.com.au/corporate-information/about-nbn-co/corporate-plan/corporate-plan.html)*,* August 2015, viewed 16 May 2016, <http://www.nbnco.com.au>, p. 63. [↑](#footnote-ref-15)
16. ACCC, Competition report, p. 4. [↑](#footnote-ref-16)
17. Examples of the different levels of video quality offered by two video streaming providers are available at: <https://help.netflix.com/en/node/306>, and <https://help.stan.com.au/hc/en-us/articles/203080460-What-is-the-minimum-Internet-speed-I-need-to-run-Stan->. [↑](#footnote-ref-17)
18. ACMA, [*Communications report 2013–14 series: Report 2—The evolution of VoIP in Australia*](http://www.acma.gov.au/~/media/Research%20and%20Analysis/Research/pdf/The%20evolution%20of%20VoIP%20in%20Australia%20pdf.pdf), June 2015, viewed 2 June 2016, <http://www.acma.gov.au/>, pp. 11-18; ACMA, [*Australians are going OTT for video and communications*](http://www.acma.gov.au/theACMA/engage-blogs/engage-blogs/researchacma/Australians-are-going-OTT-for-video-and-communications)*,* , December 2015, viewed 2 June 2016, <http://www.acma.gov.au/>. [↑](#footnote-ref-18)
19. ACCC, Competition report, p. 1. [↑](#footnote-ref-19)
20. Ernst and Young Sweeney, [*Australian Consumer Survey 2016*](http://consumerlaw.gov.au/australian-consumer-survey/)(Australian Consumer Survey), prepared for the Treasury on behalf of Consumer Affairs Australia and New Zealand, 5 May 2016, viewed 1 June 2016, <http://consumerlaw.gov.au/>.The survey noted 26% of consumers who made a telecommunications ‘purchase’ and 25% of consumers who made an ISP ‘purchase’ experienced a problem. These results marginally improved compared to 2011 (31% and 32% respectively). [↑](#footnote-ref-20)
21. The Australian Consumer Survey noted that, across the economy, the costs to industry to address consumer problems are $18.03 billion per year. The costs to consumers are around $16.31 billion per year. [↑](#footnote-ref-21)
22. For example, a [survey](http://accan.org.au/our-work/research/1159-broadband-performance-consumer-decision-making) conducted by the Australian Communications Consumer Action Network’s (ACCAN) found the majority of consumers surveyed were confused about the connection between advertised speeds and the speeds they should receive at home, 70 per cent of respondents said that they had unsatisfactory experiences with their broadband services, and the top reason was ‘slow speeds at some times of the day’: ACCAN, *Broadband speeds and performance leaving consumers disappointed*, [Media release](https://accan.org.au/our-work/1160-broadband-speeds-and-performance-leaving-consumers-disappointed), 16 February 2016, and ACCAN, *Broadband Literacy*, prepared for ACCAN by Galaxy Research, January 2016. [↑](#footnote-ref-22)
23. ACCC, BPMR Report, p. 64. [↑](#footnote-ref-23)
24. For example, as noted in the BPMR Report, Virgin Media has referred to the Ofcom broadband performance results on its website to evidence the speeds Virgin Media is providing in comparison to its competitors. Virgin Media’s website i<http://store.virginmedia.com/discover/broadband/ultrafast.html> (ACCC, BPMR report, p. 17). [↑](#footnote-ref-24)
25. The limitations of software-based testing are noted in ACCC, BPMR Report, p. 12. [↑](#footnote-ref-25)
26. See Ofcom, [*Voluntary Code of Practice: Residential Broadband Speeds (updated) 2015*](http://stakeholders.ofcom.org.uk/telecoms/codes-of-practice/broadband-speeds-cop-2010/), Ofcom, UK, 11 June 2015, viewed on 17 May 2016, <http://stakeholders.ofcom.org.uk/>. [↑](#footnote-ref-26)
27. Ibid., 2nd Principle. [↑](#footnote-ref-27)
28. Ofcom, *Automatic Compensation – Call for inputs*, 10 June 2016, p. 2. <http://stakeholders.ofcom.org.uk/binaries/consultations/automatic-compensation/summary/Automatic-Compensation.pdf> [↑](#footnote-ref-28)
29. Ibid., p. 4. [↑](#footnote-ref-29)
30. See FCC, [*Open Internet Transparency Rule*](https://www.fcc.gov/consumers/guides/open-internet-transparency-rule), FCC, 4 November 2015, viewed 17 May 2016, <https://www.fcc.gov/>. [↑](#footnote-ref-30)
31. See FCC, [*Consumer Labels for Broadband Services*](https://www.fcc.gov/consumers/guides/consumer-labels-broadband-services), FCC, 5 April 2016, viewed 17 May 2016, <https://www.fcc.gov/>. [↑](#footnote-ref-31)
32. See BEREC, *Draft BEREC Guidelines on implementation by National Regulators of European net neutrality rules*, registered 6 June 2016, <http://berec.europa.eu/eng/document_register/subject_matter/berec/public_consultations/6075-draft-berec-guidelines-on-implementation-by-national-regulators-european-net-neutrality-rules> [↑](#footnote-ref-32)
33. TIO, Complaints statistics October-December 2015 (17 February 2016) <https://www.tio.com.au/publications/news/complaint-statistics-october-december-2015> [↑](#footnote-ref-33)
34. TIO, Complaints statistics January-March 2016 ( 29 April 2016) <https://www.tio.com.au/publications/news/complaint-statistics-january-march-2016> [↑](#footnote-ref-34)
35. TIO, *Complaint statistics July-September 2015* - <https://www.tio.com.au/publications/news/complaint-statistics-july-september-2015> [↑](#footnote-ref-35)
36. TIO, *Complaint statistics January – March 2016*, <https://www.tio.com.au/publications/news/complaint-statistics-january-march-2016>, *Complaint statistics October – December 2015*, <https://www.tio.com.au/publications/news/complaint-statistics-october-december-2015>; *Complaint statistics July – September 2015*, <https://www.tio.com.au/publications/news/complaint-statistics-july-september-2015>;*Complaint statistics April – June 2015*, <https://www.tio.com.au/publications/news/complaint-statistics-july-september-2015>; Complaint statistics January – March 2015, <https://www.tio.com.au/publications/news/complaint-statistics-january-march-2015>; Complaint statistics October – December 2014, <https://www.tio.com.au/publications/news/complaint-statistics-october-december-2014>; Complaint statistics July – September 2014, <https://www.tio.com.au/publications/news/complaint-statistics-july-to-september-2014>. [↑](#footnote-ref-36)
37. For example, the construction of the National Broadband Network is a $41 billion investment in access networks: NBN Co, [*NBN Co Corporate Plan 2016*](http://www.nbnco.com.au/corporate-information/about-nbn-co/corporate-plan/corporate-plan.html), Canberra, August 2015, viewed 16 May 2016, <http://www.nbnco.com.au>. A number of other next generation access networks have been already been rolled out by network providers, a list of which can be found in ACCC, SBAS, pp.12-15. Telstra and iiNet have not announced further development of their superfast broadband networks. AAPT has not announced any reduction to the roll out of their proposed FTTB network originally announced by TPG, The ACCC expects that smaller network operators will continue to invest in superfast broadband infrastructure (SBAS, p. 43). [↑](#footnote-ref-37)
38. ACCC, 2016 Compliance and Enforcement Policy. [↑](#footnote-ref-38)
39. Australian Consumer Survey, p. 87. [↑](#footnote-ref-39)
40. NBN Co, [Wholesale speeds](http://www.nbnco.com.au/sell-nbn-services/products-services-pricing/Product-identifier/wholesale-speeds.html), op. cit. Also Part 3 of NBN Co, [NBN Co Wholesale Broadband Agreement Product Catalogue - Product Description – NBN Co Ethernet Bitstream Service](http://www.nbnco.com.au/sell-nbn-services/supply-agreements/wba2.html), 7 April 2016, viewed 16 May 2016, <http://www.nbnco.com.au/>, pp. 13-17. [↑](#footnote-ref-40)
41. The TIO has noted the primary issue for internet users in July-September 2015 was slow data speeds, particularly during peak hours. See TIO, [*Complaint statistics July-September 2015*](https://www.tio.com.au/publications/news/complaint-statistics-july-september-2015), Melbourne, December 2015, viewed 16 May 2016, <https://www.tio.com.au/>. [↑](#footnote-ref-41)
42. ACCC, BPMR Report, p. 6. [↑](#footnote-ref-42)
43. For example, the [NBN 2016 Corporate Plan](http://www.nbnco.com.au/corporate-information/about-nbn-co/corporate-plan/corporate-plan.html) anticipates an increase in consumers on higher speed tiers and increased consumption of data from FY15 to FY18: NBN Co, *NBN 2016 Corporate Plan*, p. 64. [↑](#footnote-ref-43)
44. ACCC, Competition Report, p. 8. [↑](#footnote-ref-44)
45. The US Federal Communications Commission’s (FCC) [*Open Internet Transparency Rule*](https://www.fcc.gov/consumers/guides/open-internet-transparency-rule) requires disclosure of sufficient information for consumers to make informed decisions about purchasing broadband services. This includes the disclosure of ‘network management practices’ which includes articulating the precautions providers take to manage heavy traffic on their networks: FCC, [*Open Internet Transparency Rule*](https://www.fcc.gov/consumers/guides/open-internet-transparency-rule), FCC, Washington, 3 November 2015, viewed on 16 May 2016, <https://www.fcc.gov/>. [↑](#footnote-ref-45)
46. See Ovum Consulting Group, [*Australian OTT Video – Creating a New TV Market*](http://www.nbnco.com.au/content/dam/nbnco2/documents/ott-video-in-australia-creating-a-new-market.pdf) , 18 November 2015, viewed on 16 May 2016, p. 18. [↑](#footnote-ref-46)
47. ACCC, Competition Report, p. 6. [↑](#footnote-ref-47)
48. ACCC, Competition Report, p. 1. [↑](#footnote-ref-48)
49. ACMA, *Reconnecting the Customer – Mobile network performance forum – Discussion paper*, October 2013, p. 9-10. [↑](#footnote-ref-49)
50. Ibid, p. 3. [↑](#footnote-ref-50)
51. Ibid, p. 7 [↑](#footnote-ref-51)
52. Follow the ACMA’s Reconnecting the Customer initiative, a consumer guide was developed by the Australian Mobile Telecommunications Association and Communications Alliance and launched in April 2014, in consultation with the ACMA: AMTA and Communications Alliance, *Mobile Network Performance – What you need to know*, undated <http://www.commsalliance.com.au/__data/assets/pdf_file/0007/44098/Mobile-Network-Performance-V4.pdf> [↑](#footnote-ref-52)
53. Ofcom, *Measuring mobile broadband performance in the UK – 4G and 3G network performance*, 2 April 2016 <http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/broadband-speeds/mobile-bb-april-15/> [↑](#footnote-ref-53)
54. Ibid. [↑](#footnote-ref-54)
55. Ibid, p. 13-14. [↑](#footnote-ref-55)
56. *2016 ACCC Compliance and Enforcement Policy,* <http://www.accc.gov.au> [↑](#footnote-ref-56)