



Australian
Competition &
Consumer
Commission

HFC and Optical Fibre Broadband “Speed” Claims and the *Competition and Consumer Act 2010*

An ACCC Information Paper

July 2011

Important note

This Information Paper is designed to provide basic information on the ACCC's approach to assessing potentially misleading and deceptive claims about the data transfer rates available on HFC and optical fibre broadband services. It does not cover the whole of the Competition and Consumer Act 2010 and is not an exhaustive explanation of how the ACCC will determine whether particular claims are misleading.

Moreover, because this Information Paper avoids legal language wherever possible, there may be some generalisations about the application of the Competition and Consumer Act 2010. Some of the provisions referred to may have exceptions or important qualifications. In all cases the specific details of allegedly misleading representations are taken into account when assessing whether they raise concerns.

1. INTRODUCTION

- 1.1. This Information Paper has been prepared by the Australian Competition and Consumer Commission (ACCC) to assist companies to comply with their obligations under the *Competition and Consumer Act 2010 (CCA)* when advertising broadband internet services provided over fibre-to-the-premises (FTTP) and hybrid fibre-coaxial cable (HFC) networks. While it may be of broader interest, it is not intended as a guide for consumers.
- 1.2. The increasing range of telecommunications products and services, and the bundling of different services and convergence of technologies, are providing consumers with a growing variety of applications and services. The rapid development of new technologies and the growth in competition have the potential to deliver great benefits to consumers.
- 1.3. While these are welcome market developments, they have been accompanied by increasing complexity in terms of pricing, service structure and marketing.
- 1.4. Consequently, consumers have never been more reliant on clear and accurate information being provided to them by suppliers before and during purchase to make properly informed decisions about whether a particular service suits their needs and budget.
- 1.5. Good information provision is essential to the function of strong markets as it allows consumers to meaningfully assess and compare similar products and services, and ultimately choose a service suitable to their needs.
- 1.6. Inconsistent, confusing and sometimes misleading information provision across the telecommunications sector is a factor that deters consumers from participating confidently in the marketplace and distorts market outcomes, deterring consumers from changing providers.
- 1.7. Unfortunately, the increasing complexity of market offerings has not been accompanied by improvements in the quality or accessibility of consumer information. This prevents many consumers, particularly those who do not have a high level of technological literacy, from taking advantage of these market changes.
- 1.8. Of particular concern to the ACCC is many providers' heavy reliance on attractive-sounding headline claims to market and promote services, which are qualified by a range of conditions. In many cases, this may constitute misleading and deceptive conduct in breach of the CCA.
- 1.9. In recent years, the ACCC has vigorously pursued a range of enforcement and compliance strategies to address this type of conduct. For instance, the ACCC has received enforceable undertakings from market leaders to improve their advertising standards and has taken enforcement action in the Federal Court on several occasions.
- 1.10. The ACCC has also attempted to engage the industry in improving advertising standards, including by releasing two broadband "speed" claim information

papers in January 2007 and September 2009¹ and conducting industry workshops.² This is in addition to the more generic information and advice that the ACCC provides to suppliers about advertising and compliance with the CCA.

- 1.11. Disappointingly, despite these actions, the ACCC continues to receive complaints about poor advertising and marketing.

Broadband “speed” claims

- 1.12. Over the past several years, fibre-based internet services have become increasingly desirable due to their ability to deliver higher data transfer rates than ADSL2+ or other fixed-line technologies.
- 1.13. As part of the Australian Government’s National Broadband Network (NBN) infrastructure project, 93% of households in Australia will be connected to broadband internet services through a national FTTP network. The remaining 7% of households in Australia will be provided with services using advanced wireless and satellite technologies.
- 1.14. It is expected that the NBN will be completed by 2020, although the roll-out is progressive and services are expected to be available on a commercial basis from around September 2011. This Information Paper will therefore address issues which apply to services on the NBN as well as services being provided over pre-existing HFC and FTTP networks.
- 1.15. The ACCC considers that the increased demand for, and availability of, high-speed broadband internet services will most likely be met with an increase in the level of marketing being undertaken by internet service providers (ISPs).
- 1.16. Historically, ISPs have competed largely on the basis of price, data transfer rates (i.e. “speeds”) and download quotas. This is likely to continue for services being provided over the NBN. However, with the NBN offering a wider range of wholesale data rate tiers, there may be an increased focus on “speed” claim marketing.
- 1.17. Given that ISPs on the NBN will be competing based on similar inputs, they may have incentive to overstate the real-world performance of the network or particular services so as to gain a competitive edge. ISPs may also have an incentive to reduce costs by under-provisioning their network capacity to offer more aggressive prices and/or increase profit margins.
- 1.18. The ACCC is concerned that this may result in ISPs marketing FTTP and HFC services as being capable of delivering much higher data transfer rates than what is generally available to end-users of those services. In this regard, the ACCC warns that ISPs wishing to make specific claims about the data transfer rates that a service can deliver to an end-user must be capable of substantiating those claims. The ACCC will not hesitate to take enforcement action where ISPs

¹ ACCC, ‘Broadband Internet Speed Claims and the Trade Practices Act 1974’ (the 2007 Information Paper), and ‘Mobile and other Wireless Internet Speed Claims and the Trade Practices Act 1974’ (the 2009 Information Paper), available at <http://www.accc.gov.au/content/index.phtml/itemId/756870>.

² 28 May 2009, *The ACCC and telecommunications consumer regulation seminar*, Communications Alliance/ACCC, Sydney; and 13-14 October 2009, *Truth in Advertising seminar*, ACCC, Melbourne.

under-deliver on their promises and fail to demonstrate a reasonable basis for their claims.

- 1.19. The purpose of this Information Paper is therefore to provide ISPs and their legal representatives with guidance on the key factors to consider when configuring their HFC and/or FTTP services and when developing marketing materials. The Information Paper is not a prescriptive 'marketing manual'. Rather, it sets out important principles and highlights potential risk areas for ISPs as they consider how to market high-speed broadband services.
- 1.20. While this Information Paper focuses specifically on high-speed HFC and FTTP services, the principles are consistent with the ACCC's broader approach to date and should be taken into account by ISPs providing any form of broadband internet service.
- 1.21. Ultimately, the ACCC aims to improve the level and accuracy of information being provided to consumers and to encourage ISPs to compete more vigorously and openly in relation to the quality of their broadband internet services.

The Australian Consumer Law

- 1.22. This Information Paper does not cover all aspects of the CCA. Rather, its focus is on the consumer protection provisions contained in the Australian Consumer Law (ACL), which is located in Schedule 2 of the CCA and operates pursuant to Subdivision A of Division 2 in Part XI. Relevant provisions in the ACL include sections 18, 29 and 61.
- 1.23. Section 18 of the ACL prohibits conduct in trade or commerce which is misleading or deceptive or likely to mislead or deceive. If a corporation makes a representation about a future matter, section 4 of the ACL places an onus upon that corporation to produce evidence that it had reasonable grounds for making that representation.
- 1.24. 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. The other sub-sections may also be relevant (e.g. section 29(b)).
- 1.25. Chapter 4 of the ACL contains criminal offence provisions, the most relevant of which is section 151(1). Section 151(1)(g) is identical to section 29(g) in terms of the conduct it prohibits.
- 1.26. Representations may contravene the ACL regardless of whether they are made in newspapers, magazines, online, on television, on radio, on billboards, in direct mail-out, or in any other medium. Representations made in media releases or in speeches also have the potential to contravene the ACL.
- 1.27. The ACCC can take civil proceedings in respect of conduct that it considers contravenes sections 18 or 29 of the ACL. In respect of more serious conduct, the ACCC may refer the matter to the Commonwealth Director of Public Prosecutions for consideration of whether criminal proceedings should be commenced pursuant to section 151(1).
- 1.28. Under Part XI and the ACL, the ACCC has the ability to:

- seek corrective advertising and injunctions to prevent the prohibited conduct;
- seek fines or civil pecuniary penalties of up to \$1.1 million for companies and \$220,000 for individuals for contraventions of specified consumer protection provisions;
- issue substantiation notices in relation to consumer protection matters in certain circumstances;
- issue infringement notices (requiring the payment of up to \$66,000 per contravention for listed companies and \$6,600 per contravention for unlisted companies) for contraventions of specified consumer protection provisions;
- seek orders disqualifying a person from managing a corporation as a consequence of contravening various consumer protection provisions;
- seek compensation for third parties.

1.29. It should also be noted that section 61 of the ACL provides that where a consumer has made known the purpose for acquisition or the desired result of services, there is a guarantee that the services will be “fit for purpose” or will achieve the desired result. Failure to fulfil such a guarantee may give rise to a consumer right to terminate the contract for supply of services or to recover compensation for reduction in value of the services supplied. The definition of “consumer” in the CCA may include a small business or someone who is self-employed.³

Contacts

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³ A person is taken to have acquired services as a consumer if the amount paid or payable for the services did not exceed \$40,000; or if they were of a kind ordinarily acquired for personal, domestic or household use (see: ACL s 3(3)).

2. GUIDANCE FOR INDUSTRY

Factors affecting data transfer rates on HFC and FTTP networks

- 2.1. FTTP and HFC services are capable of delivering much higher data transfer rates than other current-generation fixed line internet technologies. However, the actual user experience on these services is still subject to a wide range of factors.
- 2.2. Some factors may be within the control of an ISP. These include:
 - any limits on data transfer rates imposed by an ISP based on the broadband plan purchased by the consumer;
 - the number of customers sharing the local fibre or coax (i.e. the ‘split ratio’) in a passive optical network configuration;
 - the ‘contention ratio’ adopted by the ISP;
 - the backhaul (transmission) capacity available.
- 2.3. In relation to the Government’s NBN, the ‘split ratio’ will be determined by NBN Co. However, this will be known to retail and wholesale ISPs, and as such the ACCC would expect it to be taken into account when any claims as to likely data rates are being made.
- 2.4. The contention ratio will also be known to retail and wholesale ISPs. On the NBN, ISPs will be responsible for purchasing connectivity virtual circuit (CVC) capacity from NBN Co.⁴ In doing so, they will need to determine the contention ratio for that capacity based on the number of customers they are intending to serve and the expected nature, volume and throughput of traffic.
- 2.5. While retail ISPs acquiring Layer 3 FTTP services are unlikely to have any influence on the contention ratio adopted by their wholesale ISP or the available backhaul capacity for their service, such retailers should obtain relevant information from their wholesale ISP to assist them in accurately marketing their service.
- 2.6. The following factors affect the data transfer rates achieved by individual end-users but are generally outside the control of the ISP:
 - the number of individual end-users at a residence using the service at the same time;
 - the end-user’s hardware,⁵ software and software configuration;
 - the connection method within the premises (wireless or fixed);⁶
 - the type of content being downloaded by the end-user;
 - the source of the content being downloaded (including any content server limitations).

⁴ NBN Co, *NBN Co. Product and Pricing Overview for Access Seekers* (December 2010).

⁵ The ACCC notes that where ISPs supply hardware (including internet gateway devices) to end-users in connection with a service, the hardware must be capable of delivering the advertised data transfer rates. This is discussed in further detail in paragraphs 2.21 to 2.23.

⁶ See n5 above.

- 2.7. These factors have the potential to significantly impact the data transfer rates achieved by end-users in the ordinary day-to-day use of their service. ISPs must therefore ensure they are adequately disclosed to the extent that they will impact on end-user services.

KEY PRINCIPLE: Headline claims must represent attainable speeds

- 2.8. In the 2007 and 2009 Information Papers, the ACCC expressed the view that “speed” claims should reflect data transfer rates actually experienced by individual end-users—not merely theoretical maximums. The ACCC recommended that ISPs avoid using ‘up to’ or ‘peak’ claims where stated data transfer rates were unachievable or unlikely to be achieved by end-users.
- 2.9. The ACCC recognises that FTTP and HFC networks are capable of delivering higher maximum data transfer rates than other internet technologies. ISPs are likely to want to market this performance advantage by referring to the maximum data transfer rates on the plans offered to consumers—describing plans as ‘100/40 Mbps’, ‘50/20 Mbps’ or ‘25/5 Mbps’ for example.
- 2.10. The above descriptions generally refer to transfer rates available for downloading and uploading data from the network boundary point at an end-user’s premises to a specific point of termination in the network. However, claims about the data transfer rate applicable to a given service are likely to be misleading unless that rate is attainable in practice by end-users, subject to the factors listed in paragraph 2.6.
- 2.11. It follows that there is a high risk of consumers being misled by ‘up to’, ‘peak’ or ‘maximum’ data rate claims where they do not reflect typical end-user experiences.⁷ ISPs currently using or intending to use such headline data transfer rates may therefore wish to consider other ways to advertise and/or differentiate their services.
- 2.12. Going forward, the ACCC expects ISPs to provide meaningful and accurate information to consumers regarding the quality of service likely to be attainable by end-users in practice, both in advertisements and at the point of sale.
- 2.13. By way of further guidance, ISPs should carefully consider the following issues in deciding how to market HFC and FTTP services.

Network design and capacity

- 2.14. Real-world performance of broadband internet services is influenced by a range of parameters related to the engineering of the relevant networks. The main factors affecting data transfer rates on HFC and FTTP services are outlined in paragraphs 2.2 and 2.6.
- 2.15. A number of the factors influencing data transfer rates, listed in paragraph 2.6, are not within a retail ISP’s control. For example, retail ISPs cannot generally dictate where end-users will acquire content from. However, even where a retail

⁷ For clarity, the ACCC recognises that individual *applications* may not be capable of utilising the maximum data rate available to an end-user on their service. This will not render a specific “speed” claim misleading, provided the represented data rate is generally available to the end-user and factors affecting the end-user’s ordinary day-to-day experience are disclosed.

ISP does not own the network on which it provides HFC or FTTP services, it may have discretion over certain factors which materially influence end-user experience (outlined in paragraphs 2.2 to 2.5).

- 2.16. For example, the ACCC understands that NBN Co will be offering ISPs a range of different wholesale service options and inputs.⁸ This will enable ISPs to provide a suite of retail products ranging from entry-level (similar in performance to current generation ADSL services) to very high-end.
- 2.17. It follows that ISPs (and not NBN Co) are responsible for determining what inputs are necessary to ensure that real-world NBN service performance aligns with marketing claims and resulting consumer expectations. Specifically, if ISPs under-provision their CVC and/or backhaul transmission capacity, end-users will often not experience data transfer rates that match their purchased plan's headline rate.
- 2.18. In the case of high-end services, ISPs will most likely need to adopt very low contention ratios to prevent performance from deteriorating significantly during peak times.⁹ However, ISPs choosing to focus on entry-level services will also need to provision sufficient network capacity to deliver on any advertised headline data rates.
- 2.19. Over existing privately operated FTTP networks, the network operators have discretion over how they structure their wholesale product offerings, including contention ratios. However, to the extent that retail ISPs have knowledge of or control over contention ratios, these will need to be considered before claims about performance can be made.
- 2.20. Similarly, given that HFC networks are also subject to contention, ISPs must consider whether such networks are adequately provisioned so as to support any performance claims they wish to make.

End-user hardware and software

- 2.21. While FTTP and HFC services can deliver much higher data transfer rates than other broadband internet technologies, some current generation end-user hardware and software is not designed for very high data transfer rates.
- 2.22. For this reason, ISPs should ensure that they adequately disclose the impact that end-user hardware and software may have on the performance of high-end services. For example, ISPs may wish to explain to consumers that a single user is unlikely to be able to fully utilise their service as well as disclosing the data transfer rates which current generation customer premises equipment and technology can deliver.
- 2.23. ISPs supplying hardware to end-users in connection with a service must also ensure that the relevant devices are capable of delivering the advertised data

⁸ NBN Co, *NBN Co. Product and Pricing Overview for Access Seekers* (December 2010), p. 14.

⁹ The ACCC does note that NBN Co will be offering access virtual circuits (AVCs) on both a committed information rate and a peak information rate basis. Committed information rate services are allocated dedicated bandwidth by NBN Co, and are therefore not subject to contention in the same way as peak information rate services. However, ISPs must still consider other factors limiting data transfer rates when marketing committed information rate services.

transfer rates. If a bundled device is not capable of delivering the advertised headline data rate, the ISP must fully and prominently disclose this fact.

Network testing

- 2.24. If an ISP wishes to make specific claims about the data transfer rates that a service can deliver to an end-user, the ISP must be able to substantiate its claim. That is, ISPs must be able to demonstrate that they have a reasonable basis for claiming that particular performance levels are achievable.
- 2.25. In this regard, the ACCC has a range of investigative tools (including substantiation¹⁰ and s. 155 notices) which may be used to require an ISP to explain the basis for its claims.
- 2.26. The ACCC considers that actual tests of network performance are the most robust means of substantiating a specific claim about data transfer rates for a service. While ISPs are not required to disclose the results of network testing to consumers, it will be difficult for a provider to establish that it has a reasonable basis for performance claims if network testing has not been undertaken.
- 2.27. ISPs have discretion over how they conduct network testing. However, any testing must be appropriately designed to ensure that it captures typical data transfer rates attainable by end-users in practice, having regard to the various factors affecting data transfer rates on FTTP and HFC networks.
- 2.28. In the ACCC's view, best practice network testing results would reflect data transfer rates available to end-users in a representative sample of distribution areas during 'peak times'. Peak times would most likely surround and include the daily 'busy hour'¹¹ for traffic to and from a typical destination (preferably an overseas content server).¹²
- 2.29. Rates only likely to be experienced in ideal conditions will not be sufficient to provide a reasonable basis for claims as to data transfer rates. In addition, an ISP should specify service data transfer rates only where network testing indicates that those rates will remain achievable over time as use of the service grows.
- 2.30. During the transition to the NBN, the ACCC envisages that it may be necessary for ISPs to draw from their existing ADSL, FTTP and/or HFC customer bases to predict peak and off-peak usage patterns. ISPs would then be expected to take account of network design factors (such as the split ratio) and issues around contention and backhaul bandwidth. However, this would not excuse ISPs from regularly testing their networks during the early stages of deployment, as consumer usage patterns will likely change as faster data transfer rates become available.
- 2.31. Once the NBN has passed its initial trial stages, the ACCC would expect ISPs wishing to make specific service performance claims to regularly undertake actual performance testing for their FTTP customer base.

¹⁰ ACL s. 219.

¹¹ See for example <http://www.itu.int/ITU-R/asp/terminology-definition.asp?lang=en&rlink={789D6625-1F60-48D5-97FC-1DA3E251B2B8}>.

¹² ISPs may also want to test the data transfer rates achieved when accessing content from a typical domestic content server.

Disclosure of service limitations

- 2.32. It is the responsibility of ISPs to ensure that the overall impression conveyed by their advertising (including any disclosure of service limitations) is not misleading or deceptive. In determining whether conduct is misleading or deceptive, the test is whether on an objective basis, the conduct induces or is capable of inducing error. The ISP's intention is not relevant to this test.
- 2.33. If an ISP has under-provisioned network capacity and cannot deliver the represented data rates in practice, the use of disclaimers or qualifications will be insufficient to overcome the misleading headline claim. A consumer is likely to consider that, notwithstanding the qualifications, the headline representation has a reasonable basis.
- 2.34. The ACCC has recently taken two actions in the Federal Court against a service provider in circumstances where it used disclaimers that were insufficient to offset a misleading headline claim.¹³
- 2.35. Where an ISP has provisioned sufficient network capacity to support its advertised data transfer rates on a consistent basis, it must still disclose 'external' factors such as those identified in paragraph 2.6 which affect actual end-user experience.
- 2.36. These factors may be provided in summary form, so long as they are readily accessible and understandable to consumers. Further, the ACCC considers that such information should be provided wherever a representation about data transfer rates is made—whether online, in print, on television or in any other medium.
- 2.37. To be effective, any disclaimer or qualification must be sufficiently prominent (avoiding fine print), placed in close proximity to the main representation and easy to understand, and it must fully address the issue being clarified. If not, the overall effect of the advertisement may be misleading or deceptive and may be found to contravene the ACL.
- 2.38. If an ISP's chosen advertising medium is not conducive to a clear explanation of the external factors affecting service performance, the ISP should carefully consider whether it is appropriate to make a specific representation as to available data rates.

Quotas, shaping and excess data usage charges

- 2.39. With the widespread use of maximum data usage allowances, the ACCC considers that care must be taken when advertising a broadband internet service which attracts data transfer rate 'shaping' once a particular data quota is exceeded.
- 2.40. In particular, ISPs must fully disclose to consumers the circumstances in which shaping will take effect and the data transfer rates applicable post-shaping. In addition, ISPs must disclose the effect that the post-shaping rates will have on the use of their service (for example, that some applications will be unavailable

¹³ See: ACCC News Release, *Optus' "Think Bigger" internet plans declared 'tricky'*, NR #240/10 and *'Optus "unlimited" advertisements declared misleading and deceptive'*, NR#29/11.

or severely disrupted). Failure to do so will likely render headline claims about data transfer rates and data allowances false, misleading and/or deceptive.¹⁴

- 2.41. More generally, the use of disclaimers and/or qualifications in advertising can be problematic. Consumers currently experience difficulties in assessing the suitability of suppliers' offerings and comparing services due to highly qualified headline claims, confusing terminology, disclaimers, exclusions and other factors.
- 2.42. In November 2010, Optus was found to have contravened sections 52 and 55A of the *Trade Practices Act 1974*¹⁵ in relation to a number of its broadband internet plans. These plans offered a data allowance which was split into peak and off-peak data allowances. However, once a consumer had exhausted their peak data allowance, their data transfer rates were significantly limited in both peak and off-peak periods. This was regardless of whether a consumer had used any or all of their off-peak data allowance. In finding that Optus had contravened the *Trade Practices Act 1974*, the Court held that failing to disclose this significant limitation on the service was misleading.¹⁶
- 2.43. While this case related to ADSL2+ broadband services, the principles apply equally to FTTP and HFC services.
- 2.44. If an ISP chooses to impose excess data usage charges instead of shaping, they must also fully disclose the amount of the charges and the circumstances in which they will accrue.

3. Summary

- 3.1. The ACCC sees the increase in availability of high-speed broadband services as offering significant benefit to consumers and an opportunity for greater competition between retail ISPs. However, for these benefits to be fully realised, ISPs need to ensure that they do not market their services in such a way so as to mislead consumers and obtain an unfair competitive advantage.
- 3.2. The ACCC encourages ISPs to have regard to the above considerations when making claims regarding data transfer rates so as to avoid contravening the ACL. ISPs must ensure that where they choose to make a claim as to data transfer rates, those rates are attainable by end-users in practice and the appropriate disclosures are made.
- 3.3. The ACCC expects ISPs to accept responsibility for the data transfer rates experienced by end-users, particularly having regard to the factors affecting data transfer rates which are within their knowledge and control, and for ensuring that consumers receive the level of service that they are paying for.
- 3.4. ISPs wishing to make "speed" claims must have a reasonable basis for asserting that particular performance levels are achievable. The ACCC will not hesitate to

¹⁴ See: ACCC News Release, '*Optus "unlimited" advertisements declared misleading and deceptive*', NR#29/11.

¹⁵ The equivalent to sections 18 and 34 of the ACL respectively.

¹⁶ See: ACCC News Release, '*Optus' "Think Bigger" internet plans declared 'tricky*', NR #240/10.

take enforcement action where ISPs under-deliver on their promises and fail to demonstrate a reasonable basis for their claims.

- 3.5. The ACCC will also be discussing the issues raised in this paper with other regulators with consumer protection responsibilities, and bodies such as the Telecommunications Industry Ombudsman, to ensure there is a rigorous and consistent approach to protecting consumers.