

Ofcom response to CAP and BCAP reviews of “Up to” and “Unlimited” claims

1. Summary

1. Ofcom welcomes the CAP and BCAP reviews of broadband speeds advertising and use of the term ‘unlimited’ and considers that as the broadband market continues to evolve it is necessary that broadband advertising allows consumers to make informed decisions while also allowing advertisers to effectively communicate how their product compares to others in the market. Ofcom’s research on actual broadband speeds and consumer attitudes to broadband speeds support the need for a move away from advertising ‘up to’ headline speeds.
2. In relation to the use of speeds in broadband advertising, we recommend the following:
 - A Typical Speed Range (TSR) representing the range of speeds actually achieved by half of customers should be used when advertising broadband on the basis of speeds.
 - If a maximum ‘up to’ speed is used in an advertisement, then the TSR must have at least equal prominence. Furthermore, the theoretical maximum ‘up to’ speed stated must be a speed actually achievable by a material number of customers.
 - Advertisers should include a qualification alerting consumers to the fact that they can confirm the likely speed that they will receive at the point of sale, and must also explain in the body copy that actual speeds depend on line quality and distance from the exchange.
 - Any reference to broadband speed in advertising (for example words such as “fast”, “superfast”, “lightning”, etc) must be accompanied by a TSR, which should have at least equal prominence to these words.
 - ISPs must be able to substantiate speed claims made by providing robust data which is representative of the actual average speeds its customers receive.
3. In relation to the use of the term “unlimited” in broadband advertising, we recommend the following:
 - The use of the term unlimited is only permitted where the service in question has no usage caps through a ‘fair usage policy’ or similar.

2. Introduction

- 2.1 Ofcom welcomes the Committee on Advertising Practice (CAP) and Broadcast Committee on Advertising Practice (BCAP) review of broadband speeds advertising and use of the term 'unlimited' and is grateful for the opportunity to respond to the public consultation documents.
- 2.2 Ofcom considers that as the broadband market continues to evolve, consumers should be able to make informed decisions based on advertising and advertisers should be able to effectively communicate how their product compares to others in the market. Below we set out the following:
- Ofcom's role in respect of advertising.
 - Evolution of broadband advertising in the UK.
 - Broadband in the UK today.
 - Response to the consultation document questions.
- 2.3 In addition, we include the following Annexes
- *Annex 1 - UK fixed broadband speeds, November/December 2010.* This is Ofcom's latest research report into fixed-line broadband speeds (conducted in partnership with Sam Knows)
 - *Annex 2 - Broadband Speeds Advertising Consumer Research.* This details the findings from qualitative research commissioned by Ofcom and conducted by Futuresight, designed to evaluate the guidance options proposed in the consultation document and provide insight into the most effective way to communicate broadband speed information to consumers

3. Ofcom's role in respect of advertising of broadband services

- 3.1 Ofcom has a primary duty to further the interests of citizens and consumers. We have also conducted extensive research on consumers' views on broadband services and on the actual speeds received by consumers. In fulfilling our primary duty we believe changes to the way in which broadband services are advertised are necessary to further consumer interests as well as to ensure that consumers are not misled.
- 3.2 Ofcom has delegated the function of regulating broadcast advertising to the Advertising Standards Authority (ASA), but remains responsible for approving code rules and for deciding what action is appropriate in cases referred to it by the ASA. Although the ASA and its associated bodies are primarily responsible for ensuring that broadband advertising is not misleading, Ofcom has a keen and continuing interest in accordance with its own duties to ensure consumers are not misled.
- 3.3 In relation to non-broadcast advertising (newspapers, magazines, posters etc), CAP sets, reviews and revises the codes for standards for advertising. For broadcast advertising, there is a statutory requirement placed on Ofcom to maintain standards under sections 319 to 321 of the Communications Act 2003. Ofcom has contracted out its advertising standards codes functions to BCAP.
- 3.4 The ASA enforces and administers the CAP and BCAP codes. In relation to broadcast advertising, broadcast licensees are required to comply with directions given by the ASA, for example, to alter, restrict or end the transmission of particular

advertisements. The ASA may refer cases of non-compliance to Ofcom if it considers that there is a case for the imposition of financial sanctions, and Ofcom will consider such cases.

4. Evolution of broadband advertising

- 4.1 Over the past decade, as broadband take-up has increased, the approach to ensuring consumers are not misled has evolved as consumers' expectations have changed. Initially, for instance, broadband was regarded (and defined as such by the then regulator Oftel) as any internet connection offering speeds of 128kbit/s or over – barely above dial-up speeds. When broadband began to be offered over copper phone lines using Asymmetric Digital Subscriber Line (ADSL) technology the maximum speed available was 512kbit/s. In response to market developments, the ASA changed its approach to broadband advertising in order to prevent consumers from being misled by misuse of the term 'broadband'. In 2003 the ASA ruled against an ISP advertising a 'broadband' service offering speeds of 'up to' 128kbit/s with the reasoning that most consumers would understand broadband to mean a service offering at least 500kbit/s - hence the claim of "broadband", without qualification, was likely to mislead¹.
- 4.2 ADSL broadband services with headline speeds of 1Mbit/s and 2Mbit/s were subsequently offered, and again the approach on advertising changed in order to prevent consumers being misled. In 2004 an ISP was obliged to change the way that it advertised its 512kbit/s broadband service by removing the words "full speed" which the ASA judged to be misleading consumers into thinking it was the fastest service available².
- 4.3 Initially, for ADSL broadband services offered through copper phone lines, users had to live within 3.5 kilometres of the local telephone exchange to receive a broadband service, but this limit was increased in September 2004 when BT Wholesale removed the line length / loss limits for ADSL, and instead implemented a policy whereby they enabled the line for broadband, then tested it to see if it was capable of supporting broadband. Later, from 2005 onwards, the maximum speeds possible over many ADSL connections increased further to 'up to' 8Mbit/s.
- 4.4 Hence, most residential consumers began using broadband services whose speed was largely determined by the technical characteristics of their telephone line. The newer ADSL services worked differently from previous broadband services and, together with the removal of line length limits, this meant that there was a wider distribution of broadband speeds and fewer connections were capable of achieving the maximum headline speed. This potential disparity became greater with the wider introduction of ADSL2+ services from 2007 onwards, which have been widely advertised as offering speeds of 'up to' 20 or 24Mbit/s.
- 4.5 These newer services differed from previous services as fewer people than previously were able to achieve the headline 'up to' speeds – the ASA itself has

¹ NTL, ASA adjudication, April 2003

² Wanadoo, ASA adjudication, August 2004

described the difference between headline and actual speeds as a “gulf”³. Again, the ASA adapted its approach in respect of broadband advertising. In 2006 and 2007 it set its existing policy in respect of broadband advertising in its adjudications on Bulldog⁴ and Be Unlimited⁵. Initially the ‘up to’ 20 or 24 Mbit/s services were supplied to consumers who lived close to the exchange – this meant that initially such services offered relatively close to headline speeds. The ASA based its reasoning in part on the view that most consumers achieved more than 6Mbit/s, stating that “we considered that the difference in speed from what was claimed and what was achieved was unlikely to have a significant effect on the user”. This was because “virtually all (98%) Be Unlimited users achieved speeds of over 6 Mbit/s”.⁶

- 4.6 The consultation document sets out the ASA’s current practice and the rationale for this practice. Specifically advertised speed claims must be qualified in with the term ‘up to’ and it must be stated in the body copy or equivalent that actual speeds depend on the distance from the exchange, with other limiting factors set out in a footnote.
- 4.7 Ofcom welcomes the evolution of advertising regulation in respect of broadband services over the years. Just as in the past the approach to advertising has evolved to keep pace with consumers’ changing perceptions and expectations, Ofcom considers that the continued evolution of the market requires new guidance to ensure that consumers are sufficiently well-informed and are not misled. Before detailing our view on how advertising guidance should change (Section 5), we provide a broad overview of the UK broadband market.

5. Broadband in the UK today

- 5.1 As Figure 1 below shows, the number of residential fixed broadband connections in the UK has grown from 6.1 million in 2004 to nearly 19 million in 2010. Figure 1 also shows that households are increasingly using broadband packages with faster headline speeds. Whereas broadband was once regarded as a luxury, many consumers now regard it as an essential utility for their day-to-day social and working lives⁷. Ofcom’s consumer research (Annex 2) found that few consumers could imagine life without the internet with many consumers saying it was now at the centre of their lives.
- 5.2 Broadband has also been recognised as making an important contribution to the economy and to social inclusion and the Government has made it a goal to both extend broadband penetration further and to stimulate the roll-out of superfast broadband services. The Government has set a goal of achieving the best superfast broadband network in Europe by 2015 and is spending £530 million over the next three years including £300 million from the TV licence fee, to improve the UK’s broadband network.

³ ASA evidence on the advertising of broadband speeds to BIS Select Committee, September 2009

⁴ Bulldog Communications Ltd, ASA adjudication, September 2006

⁵ Be Unlimited, ASA adjudication, January 2007

⁶ ASA evidence on the advertising of broadband speeds to BIS Select Committee, September 2009

⁷ *Not online, not included*, Communications Consumer Panel research report, June 2009

Figure 1: Non-corporate fixed broadband connections by headline speed (million)



Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators; excludes mobile broadband connections

- 5.3 Moreover, there is a wider range of broadband services available partly as a result of the growth of local loop unbundling⁸. The number of unbundled lines – where rival communications providers such as Sky, TalkTalk and O2 offer services over BT’s copper telephone network – has passed the 7 million mark.
- 5.4 The growing use of unbundling has meant that consumers have a wide range of broadband services available as well as a more competitive range of broadband offers. According to Ofcom research, consumers were paying on average over £20 a month for a broadband service in the last quarter of 2005, but today they are paying an average of less than £10 a month for the same service.
- 5.5 The introduction of very high-speed DSL (VDSL) services which use fibre connections between street cabinets and the exchange while continuing to use copper between the cabinet and the household meanwhile means that around 15% of households are now able to choose VDSL services with headline speeds of ‘up to’ 40Mbit/s. Based on announced deployment plans of BT Openreach, such services (including ones with fibre direct to the home) will be available to around 40% of UK households in 2012 and 66% of households in 2015.
- 5.6 Similarly, cable broadband services in the UK have also developed and speeds of ‘up to’ 50Mbit/s are now available to around half of UK households, with ‘up to’ 100Mbit/s connections available to around 350,000 households by February 2011 and trials of even higher speeds now taking place. Cable broadband services are not delivered on a copper loop from the exchange to the household so are not subject to the same type of degradation over line length as DSL broadband services (although they are still subject to slowdown due to network capacity constraints, often known as contention).

⁸ A process by which a provider’s copper telephone lines are physically disconnected from its network and connected to competing provider’s networks.

- 5.7 Broadband delivered via cellular networks (often known as ‘mobile broadband’) is becoming increasingly popular, both as a complement to, but also as a substitute for fixed-line broadband services. Ofcom research⁹ indicates that 15% of adults had mobile broadband in 2010 whereby they access the internet on a PC via a mobile ‘dongle’ or datacard, with 6% having mobile broadband access but no fixed broadband connection.
- 5.8 Ofcom’s view is that current advertising practice, even when adhered to, is potentially misleading for many consumers. The continuing evolution of the UK broadband market requires further changes on advertising to ensure that advertisers are able to effectively communicate the performance of their service offers and to ensure that some consumers are not misled by ‘up to’ speeds which are considerably higher than the actual speeds available to them. We set our reasoning in more detail below.

6. Response to consultation document questions

QUESTION 1: Do respondents agree with CAP and BCAP’s view that guidance should recommend a change to advertising practice? If not, please explain why.

- 6.1 Ofcom agrees that there should be a change to the current advertising practice. Our consumer research (Annex B) also demonstrates that consumers favour change with many expressing considerable scepticism about the use in advertising of ‘up to’ speeds, as the quotes below illustrate:
- *“It doesn’t tell me anything. It makes me think that they are only able to say it because there is one person somewhere who actually gets 20 megs” (Pre-family, Edinburgh)*
 - *“Yeah, right, so they can say it because they have provided it to someone who lives right next door to the exchange and is using it at three in the morning” (Family, Banbury)*
- 6.2 Even if once appropriate, the current approach to broadband advertising has become outmoded since the broadband market has evolved considerably since the current approach was adopted, and, in combination, these changes mean that new guidance is needed in order to prevent consumers being misled. The most important developments in the broadband market, and their possible consequences for consumers, are set out further below.

Consumers are increasingly moving to higher speed broadband packages which show a greater disparity between headline and actual speeds

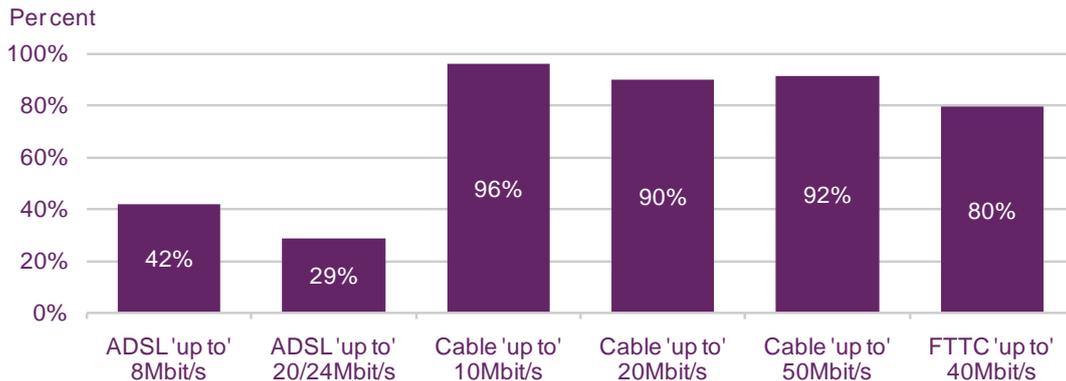
- 6.3 As Figure 1 above indicates, consumers have increasingly shifted in recent years to using higher-speed broadband packages and this has led to a growing gap between headline and actual speeds. Some years ago, the ASA described¹⁰ this disparity as a “gulf” in but it has only grown in recent years as consumers have shifted from ADSL packages to ADSL2+ services.

⁹ *Communications Market Report*, Ofcom, August 2010

¹⁰ ASA evidence on the advertising of broadband speeds to BIS Select Committee, September 2009

6.4 This is reflected in Ofcom’s latest broadband speeds research (Annex 1) which shows the disparity between headline and actual speeds. Figure 2 below shows not only that average speeds of broadband packages are much lower than headline speeds, but that there are also significant differences between different packages. Newer ‘up to’ 20/24Mbit/s ADSL2+ services have a greater disparity between headline speeds and average actual speeds than ‘up to’ 8Mbit/s ADSL packages, while the average speeds delivered by cable and fibre-to-the-cabinet are much closer to advertised speeds than those delivered via ADSL.

Figure 2: Average speeds as a proportion of headline speeds by connection headline speed and technology



Source: SamKnows measurement data for all panel members with a connection in November/December 2010

Panel Base: 999

Notes: (1) Data have been weighted by ISP package and LLU/non-LLU connections, Rural/Urban, Geographic Market classification and distance from exchange to ensure that they are representative of UK residential broadband consumers as a whole; (2) Data collected from multi-thread download speed tests.

6.5 Unless consumers are clearly informed about such disparities, there is a risk that they will suffer disappointment and detriment as a result of receiving lower speeds than they are led to expect through advertising. Ofcom research indicates that more than one in four broadband consumers receive slower speeds than they expected when they first got the service.¹¹

Consumers have a wider range of broadband packages available including superfast services and need to be able make informed choices between them

6.6 Consumers are now able to choose between a wide range of broadband packages and technologies, each with very different levels of actual speed performance. If all broadband packages available to consumers offered similar levels of performance then the continued use of ‘up to’ headline speeds would be less likely to lead to detriment caused by consumers making sub-optimal choices. But this is not the case. Most residential broadband consumers now have a wider range of broadband services available than ever before. Consumers are able to choose between broadband delivered by ADSL, VDSL, cable and cellular

¹¹ Ofcom research Q1 2010 found that 22% of fixed-line broadband users said that the actual speeds they received were slower than they expected (with a further 11% responding “Don’t know”), and 20% of mobile broadband users claiming that actual speeds were slower than expected (with 29% responding “Don’t know”), <http://stakeholders.ofcom.org.uk/binaries/research/statistics/tech-tracker-q1-2010.pdf>

networks which are advertised at different speeds, and vary hugely in the actual speeds delivered. The disparity between advertised and actual speeds can lead to consumers being misled into choosing the wrong provider for their needs.

6.7 Even though many ISPs now offer ADSL packages described as ‘up to’ 20/24Mbit/s as standard, some other ISPs tier the packages they offer by speed, with the highest speeds only available to customers who take their premium offering¹². In addition, ISPs such as BT are also offering fibre-based broadband services with higher headline speeds and some customers will be considering whether to upgrade to such packages which usually involve signing a new contract and may also involve paying more than they currently do for their current ADSL service.

6.8 Our qualitative research (Annex 2) indicates that consumers would welcome more information on broadband speeds in order to allow them to make effective and informed choices between different packages. The research found that for most situations, and with most applications, the speed that most respondents obtained was regarded as acceptable although a few of the heavier users expressed a stronger level of dissatisfaction with speed. Also a significant number of consumers liked the idea of faster access but did not regard advertisements as providing reliable information to be able to make informed choices in the marketplace:

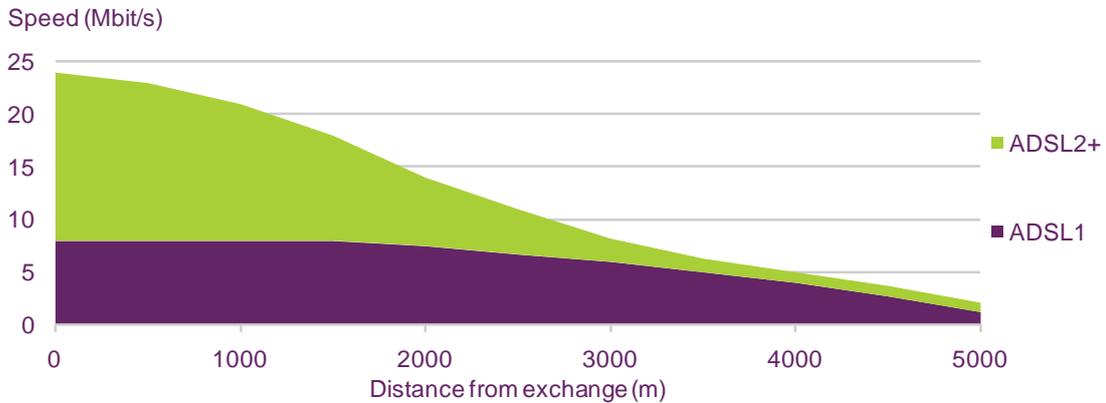
- *“They all say the same, up to 20 megabytes. It doesn’t tell me anything other than I could get anything between 1 and 20 from any of them. It doesn’t help me to choose between them” (Pre-family, Cardiff)*
- *“You can ask for a higher speed, but they’ll say that it’s not possible because of where I live. It’s hard to argue with that” (Pre-family, Edinburgh)*
- *“I think you get what you are given and all the providers are the same. It’s not in their power for one to offer me more than another” (Family, London)*

6.9 As the research report in Annex 2 states, there is a need for “marketing methods that encourage consumers to be more discriminating”. In order to help them make informed choices, consumers wanted an indication of “what they may be likely to get by way of speed rather than the highest speed available.”

6.10 This is particularly relevant when many consumers are being offered services with faster headline speeds than the package they currently receive, for example, considering whether to upgrade from ADSL to ADSL2+ services. Figure 3 below shows how theoretical maximum line speed available on ADSL and ADSL2+ services vary by line length. It shows that for consumers with a line length of more than 3km there is little difference between ADSL and ADSL2+, meaning there is little benefit in terms of speeds for consumers in upgrading to ADSL2+ services. Advertising headline ‘up to’ speeds only or otherwise suggesting that all consumers would receive significantly higher speeds through upgrading from an ‘up to’ 8Mbit/s (ADSL-based) service to an ‘up to’ 20Mbit/s ADSL2+-based service, could therefore be potentially misleading for some consumers.

¹² For instance, Be Unlimited, currently offer a package of ‘up to’ 12Mbit/s for £14.08 a month and offer higher speed packages of ‘up to’ 24 Mbit/s for £18.65 a month

Figure 3: Theoretical maximum ADSL speeds by length of line from exchange to premises (Mbit/s)

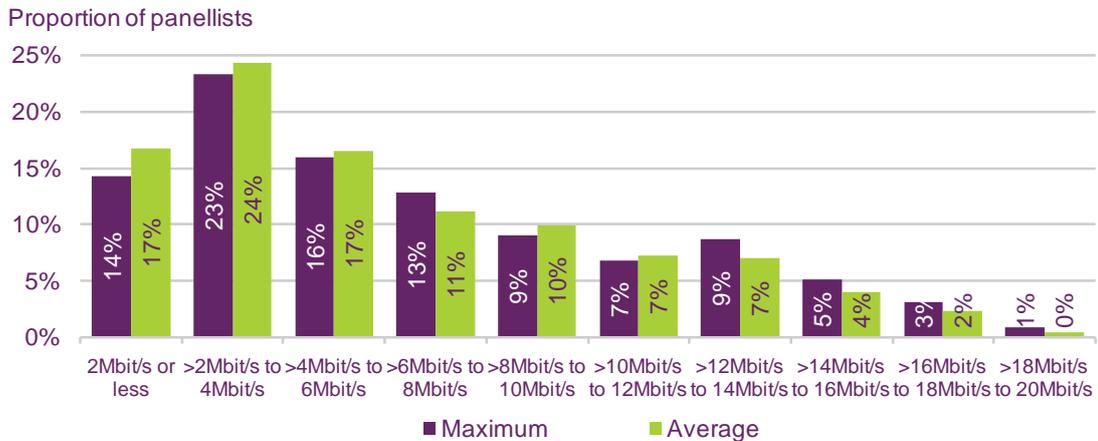


Source: <http://www.tpg.com.au/dslam/faq.php>

6.11 Advertising based solely on headline speeds could also potentially mislead customers choosing between DSL and cable services. Ofcom’s research into fixed-line broadband speed (Annex 1) indicates a significant difference between the performance of ‘up to’ 20Mbit/s cable broadband and ‘up to’ 20/24Mbit/s ADSL2+ broadband services, both in terms of average speeds achieved and in terms of the distribution of speeds achieved by different consumers. The average speed for consumers on ‘up to’ 20/24Mbit/s ADSL2+ services was 6.2Mbit/s whereas the average speed for consumers on up to 20Mbit/s cable services was 18Mbit/s. Moreover, our research found that, on average, consumers with an ‘up to’ 10Mbit/s cable package received significantly higher average speeds (9.6Mbit/s) than the average for ‘up to’ 20/24 Mbit/s ADSL2+ services (6.2Mbit/s). Consumers who relied on headline ‘up to’ speeds alone would not have information on the extent to which actual speeds of cable and ADSL services differed – the only way this can be made clear is if advertisements also include information on actual speeds.

6.12 In addition, as Figures 4 and 5 show, a significantly higher number of cable customers receive close to the headline speed than ADSL2+ customers. ADSL and cable services are often advertised at the same speed (e.g. ‘up to’ 20Mbit/s). This could potentially mislead some consumers into believing ADSL and cable services offered similar levels of performance for their line. It is also worth noting that only a minority of ADSL2+ customers receive speeds of over 6Mbit/s. As indicated in the previous section, current advertising practice is based on the finding that most ADSL2+ customers achieve speeds of 6Mbit/s or more. Now that ‘up to’ 20/2Mbit/s services have been deployed to customers with longer lines, this is no longer the case - as Figure 4 clearly shows.

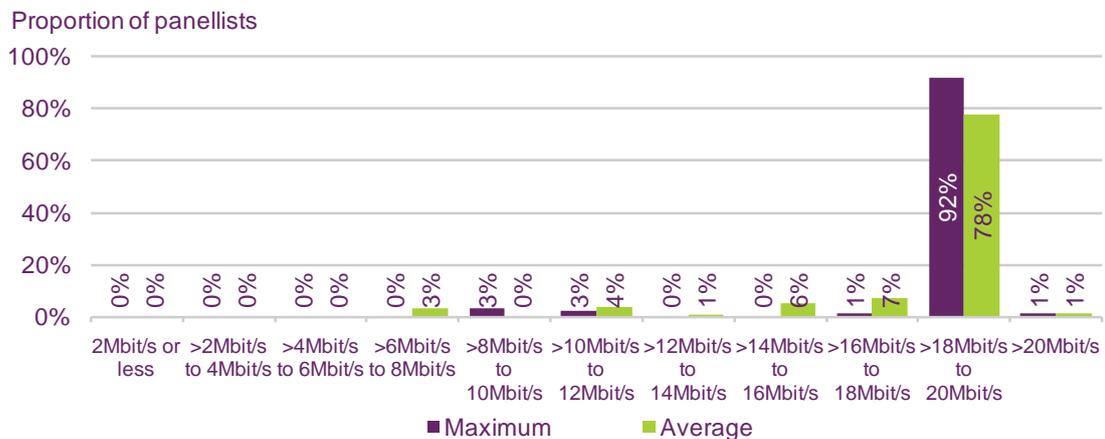
Figure 4: Distribution of maximum and average download speeds for consumers on 'up to' 20Mbit/s and 24Mbit/s DSL packages, November/December 2010 (multi-thread tests)



Source: SamKnows measurement data for panel members with a connection in November/December 2010,

Notes: (1) Data have been weighted by ISP package and LLU/non-LLU connections, Rural/Urban, Geographic Market classification and distance from exchange to ensure that they are representative of UK ADSL 'up to' 20/24Mbit/s residential customers as a whole; (2) Data collected from multi-thread download speed tests

Figure 5: Distribution of maximum and average download speeds for consumers on 'up to' 20Mbit/s cable packages, November/December 2010 (multi thread tests)



Source: SamKnows measurement data for panel members with a connection in November/December 2010,

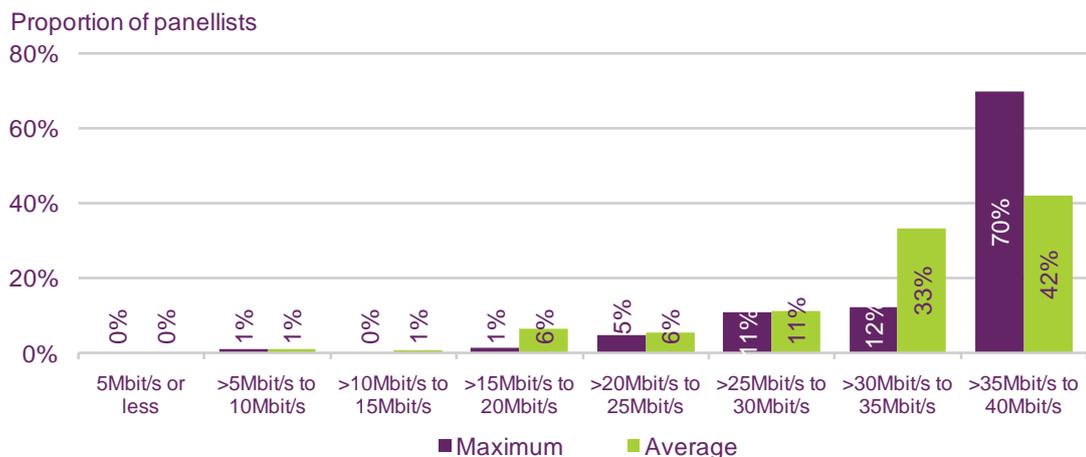
Notes: (1) Data have been weighted to regional coverage to ensure that they are representative of UK cable 'up to' 20Mbit/s residential customers as a whole; (2) Data collected from multi-thread download speed tests

6.13 As discussed above, mobile broadband services are also being used by a significant number of consumers either in addition to, or instead of, fixed broadband. If consumers are exposed to misleading advertising about the capabilities of fixed or mobile services than they may make inappropriate and detrimental choices between the two. Ofcom has also conducted research on mobile broadband speeds, the results of which will be published soon. While mobile broadband is not commonly advertised on the basis of an 'up to' speed, we

note that mobile broadband speeds are typically much lower than theoretical speeds (research published by Epihiro based on data collected during April 2009 for example found that average speeds were around 1Mbit/s, compared to theoretical speeds of ‘up to’ 7.2Mbit/s¹³). It is also the case that there is a great deal of variation in the speeds delivered by mobile broadband (although currently advertising of mobile broadband services tends not to be done on the basis of speeds)

6.14 Furthermore, the increasingly wider availability of fibre-to-the-cabinet VDSL services leads to a growing risk that consumers will make inappropriate and detrimental choices between these newer services and current generation ADSL services. BT’s Infinity VDSL service has a headline speed of ‘up to’ 40Mbit/s (i.e. twice that of existing ADSL2+ services which typically have a headline speed of ‘up to’ 20Mbit/s). But our broadband speeds research shows that BT Infinity has an average speed of 31.1Mbit/s, i.e. nearly five times as great as the average speed for up to 20/24Mbit/s ADSL2+ services, which is 6.2Mbit/s. As seen in Figure 6, the distribution of speeds achieved is also very different from that delivered to ADSL customers, with three-quarters of customers receiving average speeds of above 30Mbit/s. Neither the difference in average speeds nor distribution of speeds is evident from the headline ‘up to’ speed.

Figure 6: Distribution of maximum and average download speeds for consumers on ‘up to’ 40Mbit/s FTTC packages, November/December 2010 (multi-thread tests)



Source: SamKnows measurement data for panel members with a connection in November/December 2010,

Notes: (1) Data collected from multi-thread download speed tests

6.15 Advertising on the basis of theoretical ‘up to’ speeds therefore has the potential both to mislead consumers about the capabilities of current generation services, and also the respective capabilities of current and next generation broadband services - consumers may potentially mistrust claims that next-generation services are faster than current generation services, or not understand the relative difference. If so, there is the potential for the rollout and take-up of superfast broadband services to be constrained by misleading advertising, thereby causing consumer detriment and slowing down investment in faster broadband networks. This would impact on Government initiatives for the UK to

¹³ http://www.epitiro.co.uk/assets/files/ukmobilebroadband_final.pdf

have the best superfast broadband network in Europe by 2015, and limit the effectiveness of the £530 million it intends to spend.

- 6.16 It is important that consumers understand that headline ‘up to’ speeds are not necessarily the speeds they will receive, and for this to be made clear as early as possible in the sales process. Although Ofcom’s voluntary Code of Practice on Broadband Speeds¹⁴ requires ISP to make clear to consumers the speed they are likely to receive on their particular line, this is obviously made clear as consumers are in the sign-up process rather than when consumers are selecting which package to take. Advertising therefore has a crucial role to play in making sure that consumers understand that the difference in headline speeds between different broadband packages is not necessarily reflected in the actual speeds received. If consumers are led to expect ‘up to’ headline speeds, they may make incorrect choices and pay more than they need to.

Consumers are increasingly using high-bandwidth services

- 6.17 In our consumer research (Annex 2) we found that consumers making heavier use of streaming video applications (e.g. the BBC iPlayer) were more conscious of the need for faster broadband speeds in order to use such services effectively:

– *“Lately I have watched things on iPlayer and there’s been a bit of a delay that I’ve never had before. That’s quite recent.” (Family, Manchester)*

- 6.18 In its Be Unlimited adjudication, the ASA stated that “we understood that speeds of 8Mbps would allow users to take advantage of the vast majority of speed intensive services and functions, such as video streaming and online gaming.”

- 6.19 Even if it were once true that a household’s bandwidth needs could be met by a speed of no more than 8Mbit/s, it is no longer the case for an increasing number of households. Many households are using a broader range of internet-connected devices such as televisions, game consoles and smartphones, as well as multiple computers. Ofcom research shows that 67% of adults claim to access the internet through a computer at home while 28% of adults said they use a mobile phone to access websites, 10% who said they use a games console to do so, and 6% a portable media device. For instance, the parents in a household may be watching a streamed HD movie on the living room TV, while one of their children plays online video games through a games console in their bedroom while another uses a social network application on their computer.

- 6.20 Moreover, the belief that a defined broadband speed is indefinitely ‘sufficient’ for consumers is flawed since it misunderstands the relationship between the services available and the networks used to deliver them. The history of broadband development in the UK shows that as consumers take up faster broadband services, websites and other service providers begin offering more bandwidth-hungry services. For example, when higher-speed broadband services became more common, website developers began using Flash and similar technologies. As higher speeds became available, it became viable to develop and offer more bandwidth-hungry services – for example, it is unlikely that the BBC would have invested in its iPlayer service if the majority of consumers were

¹⁴ <http://stakeholders.ofcom.org.uk/telecoms/codes-of-practice/broadband-speeds-cop/voluntary-codes-of-practice>

still using dial-up internet services. This dynamic (rather than static) relationship between broadband networks and services means that it is difficult to foresee the developments made possible by faster broadband services nor anticipate their bandwidth needs – consumers misled by advertising may not take up faster networks which in turn constrains the growth of the new broadband applications which increase the need for faster networks. It is our view therefore that constraints on advertising should not be based on an arbitrary or point-in-time view of the bandwidth needs of consumers.

6.21 Hence, Ofcom remains concerned that the current approach to broadband speeds advertising has become outmoded and that there are a number of detrimental effects as a result of the current practice:

- Some consumers suffer disappointment when their speed is a lot lower than they expected, particularly if they perceive the term ‘up to’ as meaning that they will achieve the headline speed at least some of the time.
- Consumers in some cases choose an inappropriate or unsuitable broadband package as a result of misleading advertising.
- Take-up of, and investment in, superfast broadband services is lowered as a result of misleading information about the capabilities of existing and next generation broadband services.

6.22 Hence Ofcom considers that new guidance on broadband advertising is necessary to prevent consumers from being misled.

QUESTIONS 3/4/5/6: Do you consider that Option B/C1/C2/D meets CAP and BCAP’s policy objectives? Please give reasons for your answer.

6.23 The consultation document sets out alternative options on how broadband is advertised (set out in Figure 7 below) and it is worth considering the alternatives to the existing practice together.

Figure 7: CAP/BCAP consultation options on use of ‘up to’ speeds

Option	Outline
A	Maintaining the ASA’s present policy.
B	Advertised speeds must be available to at least 10% of users.
C1	Advertised speeds may be based on theoretical maximum performance but must be accompanied by an indication of typical performance expressed as a range.
C2	Advertised speeds may be based on theoretical maximum performance but must be accompanied by an indication of typical performance based on the actual speeds available to at least 50% of users.
D	Quoted speeds must be available to at least 50% of users.

6.24 In our consumer research (Annex B), respondents were asked for their views on these options. Overall, the majority in the sample tended to favour either Option C2 or Option C1. Option D was not widely favoured but not widely rejected either. Option A (the status quo) and Option B (availability to 10% of users) were most strongly rejected – many consumers regarded Option B as equally misleading as Option A.

6.25 Qualifying the ‘up to’ maximum speed via a Typical Speed Range (TSR) was viewed positively and was seen by consumers as helping them make a more informed choice of provider on the basis of speed. Most consumers in the sample believed that including information on typical speeds achieved would help them to make a more informed choice of provider on the basis of speed. Including information on the typical speed range was regarded by consumers as having at least two positive effects: encouraging consumers to exercise more discretion when choosing a provider on the basis of speed and also encouraging providers to improve the actual speeds that are offered to consumers. Consumers said that including information on the TSR would encourage them to think harder about the speed they were being offered by a provider, rather than not considering it at all (or simply accepting the maximum speed at face value). Consumers said information on TSRs would help them make decisions in the marketplace:

- *“Some of them are complicated, but it forces you to think” (Family, Edinburgh)*
- *“It’s better than just saying ‘up to’” (Family, Manchester)*

6.26 The research also tested consumers’ views on the form of the proposed TSRs. All, inevitably, were viewed as deficient in some way given that none provided a ‘single figure’ that accurately described the speed of access received by all subscribers to a service – such a figure can only be provided by the provider itself. If it were the case that a single figure could describe the speed consumers were likely to get then consumers indicated that they would prefer this to a range. But a single figure is unlikely to be representative for the vast majority of consumers given the skewed and wide distribution of actual speeds. For instance, in our speeds research we found that for ‘up to’ 20/24Mbit/s DSL packages the median speed achieved was 5.2Mbit/s, whereas the mean speed was 6.2Mbit/s and the inter-quartile range (25th to 75th percentile) was 3Mbit/s to 9Mbit/s. A single figure for the typical speed may therefore prove to be misleading, and a range is likely to be preferable.

6.27 Given these factors, Ofcom considers that option C1 best meets the CAP and BCAP policy objectives. Including a typical speed range (or TSR) is the most effective way of making clear that most residential broadband services do not provide a uniform consistent speed but instead provide a range of speeds depending on contention as well as attenuation. Options B and D which would allow ISPs to continue using a specific headline speed suffer one problem of the current approach – consumers may think that they are likely to receive the specific headline or average speed and suffer detriment and disappointment when they do not do so. Option C1 also has the advantage of being equally applicable to mobile broadband networks, as well as both DSL and cable fixed broadband.

6.28 We believe that the TSR is a more useful indicator of broadband performance than a theoretical maximum performance. Our consumer research indicated a strong preference for the TSR to be given either equal or near equal prominence in the advertising. Consumers stated that placing the TSR in the small print would render it ineffective to all intents and purposes. We therefore recommend that if an ‘up to’ maximum speed is used in advertising, then a TSR must have at least equal prominence.

6.29 We note that Option B is in line with current practice in relation to pricing (where an ‘up to’ price has to be available for at least 10% of the inventory) but it

is worth noting that broadband is fundamentally different to other products which are subject to these guidelines: all consumers attempting to purchase (for example) an airline ticket advertised with savings of up to 50% have the same opportunity to purchase the item in question. But because broadband speed depends on location, all consumers seeing an advertised broadband speed of 'up to' 16Mbit/s, for example, do not have the same opportunity to obtain the advertised speed. We consider therefore that Option B may be more likely to mislead customers than the options C1, C2 and D.

- 6.30 Under Option D in the consultation document, the median figure would be used to describe broadband speeds. As discussed above, however, a single figure of this sort is likely to give an unrepresentative picture of the level of performance for many consumers unless it is presented in a way which is equivalent to stating a range, e.g. 'Half of consumers get a speed of 12Mbit/s or more'. Such a description may not be easy for consumers to understand and therefore we prefer a typical speed range to this option.
- 6.31 We also note that a potential development in broadband advertising may be to move away from advertising on the basis of stated speeds, but rather to set expectations of speeds by using descriptive words (although our consumer research in Annex 2 found consumers to be suspicious of such words). We therefore recommend an additional requirement that any references to speeds in broadband adverts should be accompanied by a typical speed range which has at least equal prominence. For example, if there is a use of the word 'superfast' then this should be accompanied by the TSR. Otherwise, there is a possibility that there will be future complaints about use of the word 'superfast' and the ASA will have to adjudicate on consumers' perceived meaning of such words in the way it had to do in its 2003 adjudication on use of the word 'broadband' itself.
- 6.32 In Figure 8 below we set out what the options would mean in practice, based on data collected in our speeds research. The maximum and median speeds are calculated from speeds delivered to all panellists. TSRs for cable and FTTC packages represent the inter-quartile range of average download speeds received by panellists. The TSRs for ADSL are calculated by using the inter-quartile range from the modem synchronisation speed data collected from operators (detailed in Section 10 of our broadband speeds report– Annex 1), and adjusting this range in proportion to the difference between the average modem synchronisation speed and the average measured speed for panellists. TSRs for cable and FTTC packages represent the inter-quartile range of average download speeds received by panellists. We believe this is the most robust way of calculating the TSR from the data available to us, although we recognise that there are alternative methodologies for collecting and analysing data and reporting a TSR, which may be equally robust.
- 6.33 The data suggest that using a single figure is more likely to mislead consumers than including a range. Looking at the 'up to' 20/24Mbit/s ADSL services, the maximum speed achieved by 10% of consumers (14Mbit/s) is very significantly higher than the inter-quartile range of average speeds (3 to 9Mbit/s). Similarly, using the median value (5Mbit/s for 'up to' 20/24Mbit/s ADSL services), may mislead many consumers who, because of the characteristics of their line, will receive actual speeds which are significantly different (either higher or lower).
- 6.34 Some services, however, have a narrower typical speed range. For example, our research finds that more than three-quarters of customers on cable 'up to'

10Mbit/s packages achieve speeds of over 9.5Mbit/s. In such cases a single figure may be more appropriate than a range.

Figure 8: Maximum, median and inter-quartile range by broadband technology

	Option B: Maximum speed achieved by 10% of panellists (Mbit/s)	Option D: Median 24-hour average speed (Mbit/s)	Option C1: Typical speed range (Mbit/s)
ADSL 'up to' 8Mbit/s	7	3	2 to 5
ADSL 'up to' 20/24Mbit/s	14	5	3 to 9
Cable 'up to' 10Mbit/s	10	10	10
Cable 'up to' 20Mbit/s	20	19	18 to 19
Cable 'up to' 50Mbit/s	52	49	47 to 49
FTTC 'up to' 40Mbit/s	39	35	30 to 36

Source: SamKnows measurement data for panel members with a connection in November/December 2010, Ofcom

Notes: TSR represents the inter-quartile range 25th to 75th percentile of average download speeds, figures are rounded to the nearest Mbit/s

QUESTION 5i): Do you consider that the inter-quartile range is a suitable benchmark for a “typical” performance as a qualifier? Please give reasons for your answer.

6.35 Choosing the appropriate range for a TSR is not a simple task since a proportion of consumers will always be outside the chosen range. Our consumer research indicated, however, that most consumers thought the inter-quartile range was an acceptable compromise. But it is important that appropriate qualifications make clear that the TSR will not be achieved by everyone.

QUESTION 8 and 9 in the consultation document ask about the qualifications used in broadband advertisements and ask whether respondents agree that significant factors limiting consumer’s ability to achieve an advertised speed must be stated prominently.

6.36 As discussed above, Ofcom’s view is that maximum speeds are less useful to consumers than a TSR, and therefore that if a maximum speed claim is made in an advertisement that it should be required that a TSR has at least equal prominence. We agree with the proposal that maximum speed claims should always be qualified with the phrase “up to”.

6.37 We also suggest that headline ‘up to’ speeds can only be used if a material number of actual customers (rather than data from a laboratory test, for example) receive the headline speed in practice as a downstream speed. This would prevent, for example, ISPs from advertising ADSL2+ services with headline download speeds of 24Mbit/s which no actual consumer can attain as an actual downstream speed.

6.38 Ofcom agrees that qualifications should be displayed prominently. As discussed above, to be useful and meaningful a typical speed range cannot encompass every single consumer who may buy the service in question. It is hence also important for advertisements to have clear and prominent

qualifications which make clear that the advertised speeds may not be achieved in practice. Our consumer research also tested how prominent the TSR and other qualifications should be. There was a clear preference for information on TSRs and other qualifications on broadband speeds to be prominently displayed in the body copy rather than in the small print. The research report (Annex 2) concludes that few consumers are inclined to read the small print in the context of advertising, i.e. prior to their decision to consider the offer in more detail at point of sale. Some claimed that they did read the small print but that this was prior to signing up for the service. Many claimed that they did not read the small print at any point.

- 6.39 Even now some broadband advertisers do not make clear in the body copy of their advertisements that 'up to' speeds depend on line quality and distance from the exchange, instead confining this information to the small print. Other ISPs include the words 'up to' preceding the headline speed but do so in a smaller and less noticeable font size to the headline number, thereby potentially misleading some customers. In other examples, ISPs have included words such as 'superfast' in association with ADSL services, thereby potentially misleading consumers into thinking that the services offered are delivering speeds equivalent to those available using fibre-based next generation technology. Clear guidance is needed to prevent consumers from being misled.

QUESTION 10 asks whether respondents agree with the proposal that advertisers should include a prominent disclaimer alerting consumers to the fact that they can confirm the likely speed that they will receive at the point of sale.

- 6.40 We agree that it should be a requirement that advertisers should include a prominent disclaimer alerting consumers to the fact that they can confirm the likely speed that they will receive at the point of sale. It should be noted that ISPs who have signed up to Ofcom's voluntary code of practice on broadband speeds are already required to provide during the sign-up process an accurate estimate in a durable form of the maximum speed a customer's line is capable of.

QUESTION 11 asks whether the guidelines should include requirements on substantiation specifying that the substantiation required for performance indications must be robust and sufficiently representative of actual performance.

- 6.41 Ofcom agrees that the method of defining the TSR should be standardised so different ISPs do not use different methodologies, but this need not be specified in advance in order to avoid over-complication. However, we recommend that after a suitable period the guidance is reviewed to consider whether more prescriptive methodological guidelines are necessary.
- 6.42 Ofcom agrees with the substantiation requirements proposed and particularly regards it as important that all data are adjusted to account for protocol overheads such as IP headers so rather than using theoretical maximum headline speeds, such as up to 24Mbit/s, a material number of customers are able to receive the headline 'up to' speed.
- 6.43 Considering the other substantiation requirements, the ASA is likely at some point to have to decide whether a particular methodology such as normalisation for line length is appropriate and in compliance with the proposed guidelines.

Ofcom is happy to share our experience and knowledge of conducting broadband speeds research and to work with the ASA should such a situation arise in future.

6.44 We agree with the general requirement that data should take into account variations in speeds during the course of the day, along with the reductions in speed caused by factors such as congestion during peak times and policies imposed by ISPs such as traffic management. We are happy to share our experience of conducting speeds research further.

7. Guidance on use of the term 'unlimited'

7.1 Ofcom also welcomes the CAP/BCAP consultation on the use of the term 'unlimited' in communications advertisements. As the consultation document makes clear, the use of such packages has increased in recent years. Ofcom considers, however, that some consumers are likely to be misled by the description of such services.

7.2 The Ofcom Advisory Team (OAT) which deals with many consumer complaints has a number of examples of consumers being misled by use of the term 'unlimited'. These are outlined below:

- A consumer had a pay monthly mobile and was told at the point of sale that she would receive unlimited SMS, call and mobile internet. The consumer was subsequently and unexpectedly billed £350 for exceeding the fair usage policy which applied.
- Another consumer called to dispute a £196 bill from his mobile phone provider. The consumer stated that these were call charges resulting from calls to other mobile phones with the same provider, even though the consumer had been told that he had unlimited such calls. When he disputed this with the mobile phone company, he was told that he exceeded the 'fair usage policy' of 3000 minutes per month. The consumer stated that he was never made aware of, or received, any terms and conditions pertaining to this fair usage policy.
- Another consumer took out a mobile phone contract on the basis it had free unlimited texts. He had then had his service suspended as he had spent £157 on texting, after exceeding the fair usage limit of 3000 texts per month.
- A consumer stated that he entered into a mobile phone contract to a provider that offered unlimited internet usage because the 3GB per month limit on his previous contract was not sufficient. The consumer then found that there was a Fair Usage Policy which limited his usage to 500 MB per month, i.e. considerably less than his previous service which he found to be inadequate.
- A consumer agreed to an upgraded service with his provider on the basis that he was told that if he paid an extra £15 per month he would get 'unlimited calls' to landlines and mobiles. He subsequently received information that unlimited calls actually meant 1000 landline minutes and 300 mobile minutes. He believed their use of Fair Usage Policy was not explained at the point of sale and was mis-leading since the word 'unlimited' was used.

- A consumer signed up to an unlimited broadband service but within the first few weeks received an email from the provider stating that the fair usage limit of 100GB had been exceeded and their broadband service would be slowed down as a result.

7.3 It is therefore clear that some consumers are currently being misled by the use of the term ‘unlimited’ and that many consumers signing up to such packages are not made aware of the relevant fair usage policies. The ASA allows advertisers to claim that a service is “unlimited” when it is subject to an fair use policy provided that the existence of the policy is stated in the advertisement and the policy is fair and reasonable, i.e. it must affect only atypical users.

7.4 The consultation document proposes four options as shown in Figure 9 below.

Figure 9: CAP/BCAP consultation options on use of the term ‘unlimited’

Option	Outline
A	Maintaining the ASA’s present policy.
B	Development of the present policy to exclude FUPs that involve additional charges or suspension of service
C	Development of the present policy to exclude FUPs that involve additional charges or suspension of service and customer specific severe traffic management.
D	The exclusion of services that include an FUP that restricts usage in any way

7.5 As the examples above illustrate, option A is likely to continue to lead to consumers being misled. Under the current ASA approach, fair usage restrictions are regarded as fair and reasonable if they only apply to atypical users. But it is by no means the case that fair use policies are necessarily fair if they only affect atypical users. A fair usage policy only affecting a small number of users can still cause significant consumer detriment if the financial or other costs (e.g. disappointment at receiving slower speeds) imposed on that small number of consumers is sufficiently large. In the examples above, the consumers affected may have been in a minority but still had to pay large costs.

7.6 Also, unless usage of the term ‘unlimited’ is restricted to services which are genuinely so, consumers may make an inappropriate choice between a service which is truly ‘unlimited’ (i.e. there is no usage cap or fair usage policy) and one which is advertised as ‘unlimited’ but which does have a restrictive fair usage policy.

7.7 Our view is that a modified version of the consultation document’s Option D is the option which best meets the objectives of CAP and BCAP. Other options are likely to lead consumers to continue being misled and are more difficult to implement and interpret. Option C, for instance, states that fair usage policies can continue to be employed but must not ‘severely’ restrict access speeds of individual users. But it would be difficult in practice to define or interpret the term ‘severely’. Option D, on the other hand, would lead to clarity for consumers and be least likely to be misinterpreted by both consumers and advertisers.

7.8 However, we suggest a modified version of Option D. It is our view that advertising a service as ‘unlimited’ should not necessarily preclude all forms of

traffic management which are designed to prevent strains on network capacity. Some forms of traffic management may be a necessary component of good network management.

- 7.9 Ofcom is currently considering how consumers get clear and accurate information on the traffic management and net neutrality policies of their ISP¹⁵, and in March 2011 seven of the UK's largest ISPs published a new Voluntary Code of Practice for broadband traffic management transparency. Initiatives like these are very important in ensuring that consumers can get detailed information on the specifics of traffic management policies. However, they should be supported by clarity in advertising. For example, it may be that some consumers who see an advertisement offering "unlimited broadband" will not expect there to be a traffic management policy and may not therefore look for one.
- 7.10 There is a distinction between traffic management policies which affect the speed experienced by particular users (often called subscriber-based traffic management) and those which apply more generally to all users (application-based traffic management). Given variations in how the word 'unlimited' is used, however, we do not believe that it is appropriate to make a blanket distinction between subscriber-based traffic management and application-based traffic management in determining whether the use of 'unlimited' is potentially misleading. The word 'unlimited' is used in different contexts to describe different aspects of the service and whether its use is misleading depends on the specific context in which it is used.
- 7.11 For example, some ISPs advertise 'unlimited' broadband whereas others advertise 'unlimited' downloads or 'unlimited' usage. We consider that where 'unlimited broadband' is advertised the service in question should not be subject to either traffic management or download limits, i.e. there should be no usage caps, nor speed restrictions associated with particular types of traffic, particular periods of day, or with particular users. But where a service is advertised as offering 'unlimited downloads' or 'unlimited' usage it may not be misleading if the service in question employs some form of traffic management (e.g. slowing of all peer-to-peer traffic, or slowing the speed of very heavy users during peak times when they exceed a threshold) provided the context indicates that use of the term 'unlimited' refers to the amount of downloads rather than the service in its entirety, and the existence and nature of the traffic management are both made clear.
- 7.12 It would also be useful to clarify how use of the term 'unlimited' applies to usage caps. It is our firm view that where breaching the usage cap contained in a fair use policy leads to a suspension of the service or any additional charge it is misleading in all cases to describe the service as 'unlimited'. In some cases, however, 'usage limits' do not lead to a suspension of the service once the usage limit has been exceeded but result in a reduction in the speed of the service, i.e. the 'usage limit' is not a limit on the actual amount of data that can be downloaded so much as a threshold beyond which the speed of the user's connection is slowed. Whether consumers are being misled by use of the term 'unlimited' in such cases is likely to depend on what ancillary information is provided alongside the use of the term 'unlimited' and whether it is sufficiently prominent and clear. For example, if an ISP states with a sufficient degree of prominence and clarity that a usage threshold applies, describes where the

¹⁵ *Traffic management and net neutrality*, Ofcom discussion document, June 2010
<http://stakeholders.ofcom.org.uk/consultations/net-neutrality>

threshold lies and sets out what the consequences of exceeding the threshold are (e.g. ‘unlimited downloads - after 50GB of downloads per week, speeds will reduce by half’) then it may not be misleading to describe the service as offering ‘unlimited downloads’ since the service can continue to be used once the usage threshold has been exceeded, albeit at a significantly lower speed.

7.13 Our consultation response on use of the term ‘up to’ in broadband speeds advertising was based in part on our qualitative research on consumers’ views on broadband advertising (as set out in Annex 2). In the absence of similar research on consumers’ views into use of the term ‘unlimited’ it is more difficult to reach a definitive conclusion on how the term ‘unlimited’ should be used in future. Our consumer research indicates, however, that in general consumers tend to welcome greater transparency and clarity - our suggestions to CAP/BCAP, which our summarised in Figure 10, reflect this desire on the part of consumers.

Figure 10: Summary of Ofcom’s preferred approach on the use of ‘unlimited’ in broadband advertising

Claim	Traffic management / fair use policy		
	Subscriber-based traffic management	Application-based traffic-management	Monthly usage caps/Charge or service suspension
‘Unlimited broadband’	NO	NO	NO
‘Unlimited downloads’ or ‘Unlimited usage’	YES – if qualifications (e.g. peak-time usage cap) clearly stated	YES – if qualifications and policy (e.g. peer-to-peer traffic slowed) are clearly stated	NO

7.14 In conclusion, our view is that the decision on whether use of the term ‘unlimited’ is misleading or not depends very much on the overall context. Under our preferred modified version of Option D, ISPs advertising ‘unlimited downloads’ would still be able to employ traffic management for particular types of traffic or specific users (provided they do not face additional charges) but only if the advertisement makes clear the existence and nature of the traffic management policy (e.g. ‘peak-time usage cap of 5GB a month’). We are happy to discuss specific forms of wording for the guidance further with CAP and BCAP.