

**Title:**

Mr

**Forename:**

Steve

**Surname:**

Kennedy

**Representing:**

Organisation

**Organisation (if applicable):**

NetTek Ltd

**What do you want Ofcom to keep confidential?:**

Keep nothing confidential

**If you want part of your response kept confidential, which parts?:**

**Ofcom may publish a response summary:**

Yes

**I confirm that I have read the declaration:**

Yes

**Ofcom should only publish this response after the consultation has ended:**

You may publish my response on receipt

**Additional comments:**

**Question 1: How enduring do you think congestion problems are likely to be on different networks and for different players?:**

Congestion issues are going to remain a contentious issue as more high bandwidth content and application services come into play. ISPs are already noticing increased access to on-line TV services such as Wimbledon and the Football World Cup.

The bigger players are likely to try and make deals with the content providers to provide local delivery of content on their networks directly, while content players such as BSkyB are likely to roll-out their own IPTV services over their own infrastructure to get the content directly to the customer.

Smaller ISPs or those that don't have content deals will increasingly find it more difficult to supply enough backhaul to satisfy the demands of their customers especially as they resell services from BT such as IPStream or the 21CN equivalents.

**Question 2: What do you think are possible incentives for potentially unfair discrimination?:**

ISPs rely on economies of scale, whether they provide their own LLU offering or resell IPStream (or equivalent) services. These only make economic sense if everybody isn't using all their bandwidth all the time.

Things like IPTV or P2P filesharing can change the user characteristics considerably and they can utilise large amounts of bandwidth for considerable time.

P2P traffic shaping may be tolerated by the industry (whether the customer is made aware of it or not), but if the content is coming from the BBC say on iPlayer, then both the customer and the BBC may be disgruntled.

ISPs who charge their users flat-rate connection fees might be tempted to restrict content in some way (by type, time of day etc) as the service rapidly becomes uneconomic if all their customers are streaming video (in a unicast ie point-to-point) manner.

**Question 3: Can you provide any evidence of economic and/or consumer value generated by traffic management? :**

There is little consumer value in restricting access to content (unless it's to P2P file sharing services, but then even legal content services use P2P as a method of reducing the content provider's required bandwidth).

However there are more efficient methods of delivering content such as using multicast technologies or content providers placing caching equipment in the ISP infrastructure, though again that's only likely to be cost-effective for the larger players.

**Question 4: Conversely, do you think that unconstrained traffic management has the potential for (or is already causing) consumer/citizen harm? Please include any relevant evidence. :**

ISPs may already be providing traffic management to differentiate between differing service levels such as consumer and business broadband (which are actually delivered over the same infrastructure).

If content services are prioritised and users knowingly or not get poor service it may harm their perception of the service itself.

**Question 5: Can you provide any evidence that allowing traffic management has a negative impact on innovation? :**

Traffic management can be beneficial (i.e. by limiting effects of things such as denial of service attacks or botnet activity), however if consumers are unaware of management they may feel the service itself is poor and thus not use it, or access the service by other means such as traditional broadcast methods, which may reduce the innovation of the broadcasters delivering IPTV solutions as their user base is decreased.

**Question 6: Ofcom's preliminary view is that there is currently insufficient evidence to justify ex ante regulation to prohibit certain forms of traffic management. Are you aware of evidence that supports or contradicts this view? :**

No

**Question 7: Ofcom's preliminary view is that more should be done to increase consumer transparency around traffic management. Do you think doing so would sufficiently address any potential concerns and why?:**

No, increased transparency in terms of what kind of traffic management is in place will just be another factor that consumers will use in choosing their broadband provider.

**Question 8: Are you aware of any evidence that sheds light on peoples' ability to understand and act upon information they are given regarding traffic management?:**

No

**Question 9: How can information on traffic management be presented so that it is accessible and meaningful to consumers, both in understanding any restrictions on their existing offering, and in choosing between rival offerings? Can you give examples of useful approaches to informing consumers about complex issues, including from other sectors?:**

Broadband providers should provide easy to understand metrics that have been agreed by an independent body (such as Ofcom) so that all providers work to the same standards.

**Question 10: How can compliance with transparency obligations best be verified?:**

Ofcom or other independent body could blind test broadband providers by giving a random set of users access to software (or even software-as-service) that could measure to see if any traffic management were in the path of content.

**Question 11: Under what circumstances do you think the imposition of a minimum quality of service would be appropriate and why? :**

This is a difficult issue as broadband providers need to be able to provide services economically and traffic management may be part of this. So as long as the metrics were made clear to customers then it would just be another metric consumers would use to choose their provider.

In some ways content providers should be encouraged to efficiently deliver their content as close to the end-user as possible.