

Title:

Mr

Forename:

Russell

Surname:

Heilling

Representing:

Self

Organisation (if applicable):

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 has always been present in the access layer of consumer ISP networks. Consumers constantly drive for low prices and the easiest way to deliver lower prices is to oversubscribe the network. I believe that congestion will always be an issue in consumer access networks. This is especially the case for mobile networks where the bandwidth is much more constrained.

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

Many consumer Internet access providers are also providers of video and voice services. These providers may feel tempted to “de-prioritise” or block providers delivering similar services over the Internet in order to retain customer revenue. I believe that such actions are not feasible in the long term. New and innovative ways to deliver content appear on the Internet much faster than network providers can update their filters to block.

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

Most consumers value the price of their access over the quality of that access. In this market congestion in the access network is inevitable. In a congested network some form of traffic management is essential to ensure fairness of access. In order to provide uncongested access networks many consumer ISPs would need to increase their subscription rates which would increase the barrier of entry for those who do not yet have Internet access. This could damage the growth of the digital economy.

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. :

I believe that practices such as those mentioned in my response to question 2 could cause consumer harm. I do not believe these practices are widespread; indeed I believe that the open nature of the Internet and the way it is developed prejudices against such behaviour.

It has been shown time and again that those who find success on the Internet are those who innovate fastest. Focusing on methods to maintain an old business model is a sure way to ensure that you are left behind.

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

I cannot provide evidence of this because I don’t believe this is the case.

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? :

I agree with this view.

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?:

I agree that more transparency is required. Network measures such as "Fair use policies" are based on the assumption that they only put a limit people using an unfair proportion of the network. Transparent access to metrics such as "average consumption" and "80th percentile consumption" would help to reassure that this is really the case.

Metrics such as "packet loss percentage during busy hour" could also be useful for comparing quality and levels of congestion.

Care needs to be taken to make sure that any metrics provided can be understood by the majority of users if they are to be convincing.

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?:

Traffic management measures are usually based on complex network usage patterns. The metrics used to measure network utilisation and the measures taken to achieve fairness are often complex and can involve degree level mathematics. Presenting such metrics unaltered would provide very little benefit to most consumers.

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?:

Data visualisation is an incredibly complex topic and not one that I would claim to have mastered. The comparison of service plans is especially difficult because there are many different models that can be used to provide services.

One commonly used technique is that of a "fair use" policy. The core concept here is the 80-20 rule. 80% of resources are often consumed by only 20% of the customers. The "Fair use" clause is there to allow the ISP to take action (such as speed restrictions) against those that use an unfair proportion of the network. In order for people to evaluate whether they are being treated fairly in this situation they need to understand what their own usage is, and what the aggregated usage is across the subscriber base of their ISP. Another model that can be used is "pay as you go", where a certain volume of data may be included with the rental of the access, and any data transfer in excess of this is billed for in defined units. This type of access can be appealing to low volume users.

Meaningful statistics such as percentile measurements are complex to calculate and a deep understanding is required to make sure that the measures are correct; however they can be presented in easy to understand manners; e.g. A user could be shown a “traffic light” style graphic for their Internet usage. If they are in the lower 60% percentile they could get a green light. From 60th to 80th percentile they could get amber, and the top 20% of users would get a red signal. This would give a clear indicator of how their usage compares to other users of the service.

If users are given clear information about their own data transfer volumes then it would probably be quite easy to implement some form of online calculator which could show how much plans from various providers compare against each other. Whether the provider uses a “fair use” model, pay as you go, or a truly unlimited plan the expected usage could be used to give an estimated cost for the service much as utility providers are able to give comparative quotes when competing for gas / electric service provision.

Any such comparison method should allow users to compare on price, on congestion levels, and on speed. Different users have different criteria for selecting their provider. Businesses would often place quality of service above price, other people are willing to put up with restricted service if the price is right.

While the issue of how to present the data is a difficult one, I believe that if the raw data is made open then people will develop apps to process that data. Perhaps a public prize could be offered for the most innovative way to present this data. I think such an incentive would be a much better use of public money than any additional regulation on the industry.

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

Many service providers keep careful track of usage of their internal network resources so that they can plan capacity requirements and ensure return on investment. If a clear set of metrics is developed then such systems should be capable of taking the required measurements and either publishing them locally or via a centralised portal. Such a portal could be operated by Ofcom or by an industry body such as ISPA. Any required metrics should be simple to calculate, otherwise the system will prejudice against smaller providers that are unable to invest in expensive monitoring systems. Ideally any such metrics should be possible to gather using readily available open source network monitoring software.

Many consumer organisations have long use techniques such as “secret shoppers” to gather statistics on the performance of various networks and provide a ratings service. These activities would provide an extra incentive for providers to be honest in the information they report.

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

As voice services over the Internet become more common certain minimum quality of service requirements may be required for services such as emergency dialling.