

**Title:**

Mr

**Forename:**

David

**Surname:**

Hall

**Representing:**

Organisation

**Organisation (if applicable):**

David Hall Systems 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?:**

We consider that congestion could be more significant on wireless networks than on fibre networks which could mean that different approaches may be required to address the congestion issues. There is also the issue of how quickly the copper network is replaced by fibre which could have implications for the capacity of the fixed network.

We are concerned that the introduction of fibre links may move the congestion issues to other parts of the network and this issue requires further investigation. The players that require real time high bandwidth connectivity to support their applications are more likely to be adversely affected by congestion problems though with the evolution of services and applications other players could be affected in the near future.

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

The main incentive is for one provider to be able to gain competitive advantage over others by ensuring that their content is delivered to a higher standard. Another incentive is where a service provider has links to/or supports an application or service which he favours over similar applications and services provided by other entities. However we consider that there could be other situations that could result in unfair discrimination and this requires further investigation to fully understand all aspects. We are also concerned that a dominant content provider may use its market position to ensure that capacity is available for its content so reducing the network capacity available for others and thus discriminating against the smaller players. Such action will increase the position of the dominant player.

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

No comment

**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. :**

It is difficult to identify specific evidence but we consider that consumers may already be suffering harm from traffic management and the potential for this is likely to increase. This could range from finding it difficult to access certain services or applications through to slow traffic rates at certain times. However the slow traffic rate is a difficult issue as it could be due to other factors such as contention etc. It may be significant that there are a large number of complaints regarding broadband speed and there is a need to fully understand the reasons for this, including determining if current traffic management policies are causing any of the difficulties.

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

Again it is difficult to identify specific evidence but it does appear that the development of some services and applications is affected by traffic management and congestion issues. There is also some evidence that currently services and applications are being developed to fit within the constraints of the existing network. This is restricting innovation and these services and applications will need to be modified when the network capacity is upgraded. This is an additional cost that will have to be carried by somebody which could have a negative impact on future innovation.

**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 comment

**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?:**

We consider that increasing consumer transparency would add clarity to the situation and increase public awareness of the issues. However we are not convinced that this will address all potential concerns as new concepts and techniques will continue to be developed which could mean that ensuring adequate transparency is an evolving issue. There may also be a potential issue with consumers finding it difficult to understand the information that is provided and this aspect is touched on in our responses to the following two questions.

**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?:**

Again it is difficult to identify specific evidence though it appears that some forms of information are more easily understood than others. Unfortunately it seems that traffic management information falls within the more difficult to understand category. There is a need to better understand the reasons for this and subsequently develop more easily understood forms of information. With the wide range of skills and abilities possessed by citizens and consumers there may be a need for the information to be presented in multiple ways to ensure that it is fully understood.

**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?:**

The presentation of this information and the ability to compare different offers is difficult to achieve in a simple form that could be understood by a wide range of users with differing abilities, indeed in the previous question we have suggested that there might be a need to present this information in multiple ways to ensure that it is fully understood. We are not convinced that there are any good examples from other sectors as all sectors seem to generate a range of complaints on issues such as pricing etc. From Ofcom documentation it appears that there are more complaints regarding broadband than fixed or mobile with the impression that people are more motivated to complain about broadband issues. It may be appropriate to understand the reasons for

this and base the provision of information on the results of this research. A possible reason for the greater propensity to complain about broadband may be due the increasingly important role it is playing in our lives so this may have implications for the way the information is presented.

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

At the basic level there needs to be a system in place for undertaking this task. We consider it would be most appropriate for this compliance verification to be undertaken by an industry based body as a form of self regulation. However if this is inappropriate or fails then Ofcom should undertake the task. The practicalities of undertaking the task could depend on the means by which the information is presented to citizens and consumers.

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

Minimum quality of service appears to be a good concept but could be a very difficult concept to apply. There is a need to determine how this value could be quoted and measured so that it is easily understood. We are not convinced that this objective is feasible. Additionally as this minimum quality might only apply to the ‘best efforts’ Internet network it may cause confusion when comparing this network with other forms of Internet network. There is a need to understand the relationship between minimum quality of service, end to end quality of service requirement, and Universal Service Obligations. Currently we consider that this relationship is not fully understood and this could have more implications for citizens than consumers.