



**Mobile Future  
Ofcom NN Consultation Submission**

*This submission by Mobile Future intends to focus entirely on the issue of traffic management on mobile broadband networks. As a broad-based coalition of businesses, non-profit organizations and individuals interested in advocating for an environment in which wireless technology and services are enabled and encouraged, the issue of traffic management is critical to the future of wireless technologies. However, it must also be recognized that the omission of fixed line broadband from this submission must in no way be misunderstood as condoning the limitation of operators to effectively manage their networks. Innovation and growth in both fixed and mobile broadband is dependent upon a regulatory environment that encourages investment and innovation across the communications ecosystem.*

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

*While mobile broadband is still in its infancy, tremendous limitations on capacity already exist. And while these mobile networks continue to expand and improve, the physical limits of available spectrum make this lack of capacity an ever present obstacle to the rolling out of mobile broadband.*

*As we established in our report, “Net Neutrality Regulatory Proposals: Operational and Engineering Implications for Wireless Networks and the Consumers They Serve”, we have only begun to scratch the surface of growing consumer demand for mobile broadband, while capacity is already reaching its limits.*

*Therefore, traffic management, along with the rolling out of next generation wireless technologies, are critical to maintaining the viability of open, functional mobile networks. Otherwise, one of the most viable options for providing broadband in rural and underserved communities where fixed lines are not economically viable, will be stifled before it has a chance to prove its use.*

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

*In today’s highly competitive broadband market, introducing unfair discrimination to limit a consumer’s Internet experience is not in any network operator’s best interest.*

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

*As outlined in the first question, the importance of mobile broadband to achieving universal broadband access makes maintaining the viability of this technology of the utmost importance.*

*This will allow for more competitive universal broadband options in communities that might not otherwise have it, particularly in rural regions. While mobile service can help make broadband access more affordable, it will also provide the means for individuals and communities to participate in e-commerce, access online services, and engage in the global Internet community. However, increasing consumer usage in the mobile space inevitably will put additional demands on networks already facing capacity constraints. Network operators must have the flexibility to manage their networks to ensure the quality of service mobile subscribers have come to expect.*

*All of this will only be possible through the implementation of traffic management. Some forms of traffic or network management are inherently required to share at least the radio access network component of mobile wireless networks—this management of the network keeps it working. Growing congestion is the greatest threat to the ongoing viability of mobile networks, and the success of bandwidth intensive online content and applications, including new offerings in mHealth, mLearning, public safety and entertainment, pose in themselves the greatest challenge to mobile networks.*

**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.

*Traffic management practices are beneficial to mobile networks and the consumers who subscribe to them. These practices and techniques are constantly evolving in response to changing network conditions and traffic patterns; regulatory constraints that limit the ability of network operators to develop or adopt traffic management practices cannot be updated swiftly enough to keep pace with changing technologies and network conditions. It is in the interest of mobile network operators and their customers to maintain open Internet access, allowing all users to access the content of their choice in a manner that does not degrade the experience. As consumer demand continues to drive new applications and devices into the mobile marketplace, developers must remain cognizant of capacity constraints and work to produce more efficient technologies. However, regardless of application efficiency and device design, data traffic inevitably will continue to increase significantly. Mobile networks must be managed to handle bandwidth congestion in a manner that will ensure subscribers maintain a reasonable quality of service as new mobile applications and services lead to more demands on the networks.*

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

*No. Traffic management is itself a type of innovation that must continue to evolve to keep pace with new developments in services and applications, so as to maintain good quality of service for all. Without network management, the same services and applications risk never reaching their potential, simply due to bandwidth constraints. Traffic management can help enable the success of innovative new applications and services, from all sources, by facilitating the optimized sharing of limited bandwidth resources.*

**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?

*The lack of evidence cited by Ofcom, and this ensuing discussion, offers an ideal illustration of “net neutrality” being a solution in search of a problem. The European Commissioner for the Digital Agenda, Neelie Kroes, emphasized this very point when speaking at an event on net neutrality in Paris hosted by French telecoms regulator ARCEP.*

*In addition, while emphasis has been placed on isolated cases of anti-competitive behavior, there is a concerted attempt to ignore that these isolated cases have all been addressed under existing competition laws. Denying network operators the flexibility required to maintain innovation due to the minor transgressions of a select few within the industry would be unwise policy.*

**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?

*Meaningful transparency not only ensures that consumers are properly informed of the parameters of their mobile networks, but also opens the sector to increased information and collaboration. As previously stated, this sector is still in its infancy, and continued sharing of information, particularly through public disclosures, would allow consumers and industry actors alike to benefit from a wealth of information.*

**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?

*Ultimately, the successful application of traffic management will result in a seamless user experience that allows consumers to benefit from reliable data streaming in a manner ensuring high quality of service of all applications and content.*

*However, as this technology has yet to be fully implemented, it would be premature to speculate as to the ability for consumers to fully understand the technical intricacies of traffic management. It is the opinion of this organization, however, that healthy discussion (as illustrated by this consultation) will provide the necessary perspective for informing users and the public at large of the opportunities afforded by traffic management.*

**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

*As long as practices are clearly explained when subscribing to a service, and dialogue is maintained between the provider and the user, confusion should be relatively minor and simple to address. Meaningful transparency is critical to this effort, and must be encouraged and enforced.*

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

*This can be achieved through standard monitoring and participation by users through surveys and dialogue with providers and regulators.*

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

*The imposition of minimum quality of service standards would enshrine technology capabilities at the current least common denominator and make it homogenous, which would tend to stifle mobile broadband development by limiting the ways in which carriers can differentiate themselves and compete with one another. Mobile broadband infrastructure development and expansion of service should be encouraged above all else. This will ensure that individuals are connected, and allow users to emphasize the development of infrastructure, which is the most capital intensive aspect of the mobile broadband market. It will also make it cheaper and easier to introduce next generation technology as the sector develops, thereby providing increased bandwidth and capacity.*

*Ofcom must address this issue with great care, as minimum quality of service, coupled with net neutrality regulation, would expose providers to contradictory regulations that will create chaos within the sector.*