



National Cable & Telecommunications Association

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**CABLE'S BROADBAND SERVICE:
A CONSUMER SUCCESS *BECAUSE OF* REASONABLE NETWORK
MANAGEMENT**

The cable industry has invested tens of billions of dollars in a smart network that provides an open Internet platform, where consumers can access any legal content and use any application.

- Cable operators have invested \$145 billion since 1996 to build fiber optic networks that have brought high-speed Internet access to more than 90 percent of the United States. They are committed to delivering an open and satisfying Internet experience to their customers, and the dramatic growth in cable broadband subscribers is evidence of their success in doing so.
- Cable has built a smart network with the capability to evolve and meet the challenges of multimedia, file sharing, and other bandwidth-intensive applications that are the future of next generation broadband networks. Cable customers enjoy the full benefits of broadband because cable operators manage their networks on a content-agnostic basis to provide seamless connectivity, deter spam and viruses, and make sure that a tiny minority of users don't slow down the Internet for everyone else.
- Far from discouraging competition, network management protects the ability of our customers to download and stream video. Sound network management is essential to ensuring a stable broadband platform that content providers such as Google and Yahoo!, and over-the-top service providers like Vonage and their users can rely on.

Cable operators must be able to utilize a wide array of content-agnostic network management tools in order to ensure the best possible broadband experience for all of their customers.

- Cable providers built a smart infrastructure that has the capability to evolve and meet the challenges of multimedia, file sharing, and other bandwidth-intensive applications. But cable broadband subscribers currently enjoy the full benefits of broadband only because cable operators manage their networks on a content-agnostic basis to provide seamless connectivity, deter spam and viruses, and make sure that a tiny minority of users don't slow down the Internet for everyone else.
- Various estimates are that as few as 5% of customers use from 50 to 90% of the total capacity of the network. Faced with these voracious bandwidth consumers, cable operators may engage in reasonable, content-agnostic network management practices -- triggered by objective criteria based upon network traffic levels -- to ensure that the relatively few customers who utilize bandwidth-heavy applications do not degrade or otherwise adversely affect broadband Internet access for the vast majority of customers.
- Some groups allege that network management practices affecting P2P traffic or applications like BitTorrent are "discriminatory." These groups ignore the fact that P2P traffic can consume a disproportionately large amount of network resources, and that, in fact, some P2P protocols are

written specifically to commandeer as much bandwidth as possible. This means that even increasing network capacity will still not solve the problem often created by users of this type of application. Usage of these bandwidth-hogging protocols even by a small fraction of customers can interfere with the ability of the vast majority of consumers to surf the web, watch streaming video, make voice-over-IP calls, or engage in other routine uses of the Internet.

- Reasonable network management practices are also vital to combating the well-documented, illegal distribution of copyrighted material on the Internet.

Network management is transparent to cable customers.

- Every cable operator's authorized use policy discloses the fact that the operator must manage its network to deliver the kind of broadband service that its customers expect. Some operators even go so far as to explain that network management techniques may from time-to-time delay certain traffic if that traffic could have an adverse effect on other customers' use of the service.
- Far from inhibiting access, smart network techniques protect the ability of our customers to make the greatest and most flexible use of the Internet. They are a reasonable response to an identified congestion problem that has the benefit of allowing all other applications to work better, particularly applications like VoIP and streaming video that are particularly susceptible to transmission delays. While network management today is unnoticed by consumers, the opposite -- ineffectual or compromised management -- would not be true.

Regulation of network management practices will degrade the broadband experience for all users.

- Under the guise of preventing discrimination, the FCC ruled in August 2008 that broadband providers who seek to justify the reasonableness of (undefined) "highly questionable" network management practices "must clear a high threshold" and show a "tight fit between" a chosen practice and a "critically important interest."
- The Commission's ill-considered ruling effectively puts every network management strategy up for debate before regulators -- but the government lacks the expertise or resources to second-guess the thousands of network management decisions broadband network engineers must make every day.
- Network management practices are constantly changing and evolving -- as networks grow, consumer usage patterns change, and new technologies emerge. Depriving network operators of certain bandwidth management tools only makes the network less efficient for everyone. Adept network optimization techniques are fundamental to creating and preserving the stable "ecosystem" for online service providers that ensures an optimal customer experience.

For the benefit of their subscribers, broadband providers should be encouraged to utilize reasonable network management tools. Government regulation of broadband networks is particularly inappropriate, given the need for network operators to develop network management tools that respond to new network abuses that harm the vast majority of broadband users.