

**Written Statement
Of**

**The Honorable Kevin J. Martin
Chairman
Federal Communications Commission**

**Before the
United States Senate
Committee on Commerce, Science and Transportation**

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Good morning Chairman Inouye, Vice Chairman Stevens, and Members of the Committee. Thank you for inviting me here today to provide my thoughts on the future of the Internet and the Commission's current role on some of the issues being discussed today.

Over the past decade, the Internet has had a powerful impact on the economy and on the lives of American citizens. We have witnessed the fruits of increased innovation, entrepreneurship, and competition that this technology has helped deliver. As policymakers, any rules of the road in this area must maintain an open and dynamic Internet that will allow it to continue to be an engine of productivity and innovation that benefits all Americans.

I. FCC PRINCIPLES PROTECTING CONSUMER ACCESS TO THE INTERNET

The Commission has a duty to preserve and promote the vibrant and open character of the Internet as the telecommunications marketplace enters the broadband age. In 2005, the Commission adopted an Internet Policy Statement containing four principles. The Commission's goal was to clarify how it would evaluate broadband Internet practices on a going forward basis.

Specifically, the Commission established the following principles:

To encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet,

- Consumers are entitled to access the lawful Internet content of their choice;

- Consumers are entitled to run applications and use services of their choice, subject to the needs of law enforcement;
- Consumers are entitled to connect their choice of legal devices that do not harm the network;
- Consumers are entitled to competition among network providers, application and service providers, and content providers.

The Commission explicitly noted that these principles were subject to reasonable network management.

The Commission was seeking to protect consumers' access to the lawful online content of their choice. The intent of these principles was to foster the creation, adoption and use of broadband Internet content, applications, and services, and to ensure that consumers benefit from that innovation.

II. FCC'S ROLE IN PROTECTING CONSUMERS AND ENFORCING OUR PRINCIPLES

As the expert communications agency, it was appropriate for the Commission to adopt, and it is the Commission's role to enforce, this Internet Policy Statement.

In fact, the Supreme Court in its Brand X decision specifically recognized the Commission's ancillary authority to impose regulations as necessary to protect broadband internet access.

I do not believe any additional regulations are needed at this time. But I also believe that the Commission has a responsibility to enforce the principles that it has already adopted. Indeed, on several occasions, the entire Commission has reiterated that it has the authority and will enforce these current principles.

For example, in 2006 when I appeared before this Committee, then Chairman Stevens asked me whether the Commission had the existing authority to take action if a problem developed. And I responded that the Commission had authority under Title I to enforce consumers' access to the internet.

Moreover, almost exactly one year ago, the Republican Majority of the Commission, with the Democrat Commissioners concurring, committed to enforcing our existing principles and the policy statement. Specifically, in April 2007, the Commission expressly stated:

The Commission, under Title I of the Communications Act, has the ability to adopt and enforce the net neutrality principles it announced in the Internet Policy Statement. The Supreme Court reaffirmed that the Commission "has jurisdiction to impose additional regulatory obligations under its Title I ancillary jurisdiction to regulate interstate and foreign communications." Indeed, the Supreme Court specifically recognized the Commission's ancillary jurisdiction to impose regulatory obligations on broadband Internet access providers.¹

Finally, the Commission has already taken enforcement action in response to other complaints. In the Madison River complaint, the Commission ordered a telephone company to stop blocking VoIP calls.

¹ *Broadband Industry Practices*, WC Docket No. 07-52, Notice of Inquiry, 22 FCC Rcd 7894, 7896, para. 4 (2007) (internal footnotes omitted).

Contrary to some public claims about Commission's approach generally, for the Commission to take enforcement action against a telephone company for blocking and degrading a particular application but refuse to pursue enforcement action against a cable company blocking or degrading a particular application would unfairly favor the cable industry.

I believe that the Commission must remain vigilant in protecting consumers' access to content on the internet. Thus, it is critically important that the Commission take seriously and respond to complaints that are filed about arbitrary limits on broadband access and potential violations of our principles. Indeed, I have publicly stated that the Commission stands ready to enforce this policy statement and protect consumers' access to the internet.

III. FRAMEWORK FOR EVALUATING REASONABLE NETWORK MANAGEMENT COMPLAINTS

The Commission should address issues of appropriate network management using a consistent framework. There are several factors that I believe the Commission should use when analyzing complaints and concerns about network management practices by broadband operators.

First, the Commission should consider whether the network management practices are intended to distinguish between legal and illegal activity. The Commission's network principles only recognize and protect user's access to legal content. The sharing of illegal content, such as

child pornography or content that does not have the appropriate copyright, is not protected by our principles. Similarly, applications that are intended to harm the network are not protected.

Second, the Commission should consider whether the network service provider adequately disclosed its network management practices. A hallmark of whether something is reasonable is whether an operator is willing to disclose fully and exactly what they are doing.

Adequate disclosure of the particular traffic management tools and techniques -- not only to consumers but also to the designers of various applications and entrepreneurs -- is critical.

Application designers need to understand what will and will not work on a particular network. For example, does an application developer know that the operator may actually insert reset packets during a session masking the network operator's identity?

Consumers must be fully informed about the exact nature of the service they are purchasing and any potential limitations associated with that service. For example, has the consumer been informed that certain applications used to watch video will not work properly when there is high congestion?

Particularly as broadband providers begin providing more complex tiers of service, it's critical to make sure that consumers understand whether broadband network operators are able to deliver the speeds of service that they are selling. For example, if Internet access is sold as an unlimited service, do consumers understand that if they use too much of it they can still be cut-off?

Finally, the Commission should consider whether the network management technique arbitrarily blocks or degrades a particular application. Is the network management practice selectively identifying particular applications or content for differential treatment? If so, I believe that we should evaluate the practices with heightened scrutiny, with the network operator bearing the burden of demonstrating that the particular practice furthered an important interest, and that it was narrowly tailored to serve that interest.

Such an approach would not mean that any action taken against a particular application would automatically be a violation. Rather, it would trigger a more searching review of both the particular concern and whether that network management solution was tailored to resolve the particular harm identified to the network in as narrow a manner as possible.

In a manner similar to the way in which restrictions on speech are analyzed, network management solutions would need to further a compelling or at least an important/legitimate interest and would need to be tailored to fit the exact interest. Such practices should not be overly broad in their application so that they become over or under inclusive. For example, if the concern is about stopping certain illegal content, a network provider should not block a particular application to all users if that application transmits both legal and illegal content.

Such an analysis would recognize the importance of legitimate network management techniques while giving the Commission the framework to analyze carriers actions on a case-by-case basis. As we move into an era in which network operators are taking particularized actions against individual applications and content, the Commission should evaluate such practices

under sufficient scrutiny to ensure that whatever actions the operators are taking are actually furthering a legitimate purpose and are narrowly tailored to serving that legitimate purpose.

IV. PENDING COMCAST COMPLAINT

Consumers have alleged that certain operators, and specifically Comcast, are blocking and/or degrading consumers' access to the Internet by distinguishing between applications.

The Commission has heard from several engineers and technical experts who have raised questions regarding the network management techniques used by Comcast for peer-to-peer traffic.

The Commission is still investigating these complaints and we have not yet determined whether the actions violated our principles protecting consumer access to the Internet. However, Comcast appears to have utilized Internet equipment from Sandvine or something similar that is widely known to be a relatively inexpensive, blunt means to reduce peer-to-peer traffic by blocking certain traffic completely. In contrast, more modern equipment can be finely tuned to slow traffic to certain speeds based on various levels of congestion.

Specifically, this equipment (1) blocks certain attempts by subscribers to upload information using particular legal peer-to-peer applications by pretending to be the subscriber's computer and falsifying a "reset" packet to end the communication, and (2) degrades the corresponding attempts to download information using the same peer-to-peer applications.

Based on the testimony we have received thus far, I think it is important to clarify a few points.

Contrary to some claims, it does not appear that cable modem subscribers had the ability to do anything they wanted on the Internet. Specifically, based on the testimony we have received thus far, some users were not able to upload anything they wanted and were unable to fully use certain file sharing software from peer-to-peer networks.

Contrary to some claims, it does not appear this network management technique is “content agnostic.” Indeed, Comcast has publicly stated that it will migrate to a “protocol” (content) agnostic approach to traffic management in the future, and thus conceded that the techniques currently in use are not “content agnostic.”

Contrary to some claims, it does not appear that this technique was used only to occasionally delay traffic at particular nodes suffering from network congestion at that time. Indeed, based on the testimony we have received thus far, this equipment is typically deployed over a wider geographic or system area and would therefore have impacted numerous nodes within a system simultaneously. Moreover, the equipment apparently used does not appear to have the ability to know when an individual cable segment is congested. It appears that this equipment blocks the uploads of at least a large portion of subscribers in that part of the network, regardless of the actual levels of congestion at that particular time.

Finally, contrary to some claims, it is not clear when they will actually stop using their current approach. They claim that they will deploy this new solution by the end of the year but it

is unclear whether they will be finished deploying their solution or just starting that migration. Indeed the question is not when they will begin using a new approach but if and when they are committing to stop using the old one.

V. NEXT STEPS

As the Commission continues its investigation into the complaints before it, the most important and first step that we can take in fulfilling our responsibility is to make sure that we are fully informed. At the very least, we need to obtain greater information to more fully understand what is happening and what impact operators' actions are having so that we may better evaluate the reasonableness of any network management practices at issue.