

13 February 2008

The Honorable Kevin Martin, Chairman
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Dear Mr. Chairman:

This letter is in response to the FCC's "Notice of Inquiry" (WC Docket No. 07-52): In the Matter of Broadband Industry Practices.

About the Institute for Policy Innovation

The Institute for Policy Innovation (IPI) is a twenty year old free-market public policy research organization. IPI researches and promotes sound policy solutions that feature lower taxes, fewer regulations, and a smaller, less-intrusive government. IPI specializes in issues of economic and technology policy.

IPI does not lobby. We do not represent companies or industries, and we do not advocate the passage of any particular piece of legislation. We do, however, advocate policies that stimulate economic growth, and we are convinced that correct communications policy will spur increased economic growth and competitiveness in the United States, and provide consumers with increased availability of valuable products and services.

We appreciate the opportunity to submit comments regarding the network practices in the broadband industry.

Network management today

A necessary part of the efficient and effective function of any network is management of that network, whether it is a network for electricity, water, automobile traffic, or traditional telephone service. In fact, recent articles have highlighted the renewed push in the electricity industry to add "smarts" to the current systems in an attempt to provide the same quality of service but to help reduce demand during the peak hours, in fact bragging of new abilities allowing for "second-by-second tinkering."

Some seem to think that such network management is something nefarious, a ploy by companies as some self dealing plan that stretches beyond trying to provide sufficient customer service. But could we even imagine a serious policy debate that the electrical grid should be left to operate without any attention to peak use, peak generation of electricity, or efforts to ensure a continuous appropriate supply?

How did network management begin in telecommunications, or even more specifically for the Internet? Just as in other networks – because of the need for some simple and necessary guidance.

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The first Internet network management began as the use of the Internet spread and as consumers wanted faster and better connections. The first management was to ensure that packets of data were delivered faster and with increasing efficiency. Later, efforts were put into place (more network management) to manage spam so that tens of millions of pieces of spam are not delivered everyday. In addition, networks now implement standards (more management) to try to protect consumers from phishing. In the future all sorts of helpful intelligence may be built into the network either to improve it and customer service, or to keep it from being degraded by those who would cause harm.

In almost all cases, network management today is unnoticed by consumers. The opposite, a total lack of management, would not be true. If network operators were precluded from managing their networks, consumers would be negatively affected. Simply imagine a day where, as some would have it, that all “management” were abandoned. Imagine a complete slow down and break down of the communications system.

Another way to manage a system is to guard it from those who cause harm to the system or to a specific group of individuals. Providers today in part protect their property and their customers through not disclosing any number of protective efforts they pursue. Requiring companies to specifically disclose how they manage their networks is counterproductive, as it simply could provide a roadmap those who would try to get around such management techniques, such as spammers, pfishers, creators of worms and viruses, and others whose purpose is to harm the consumer.

Who owns what?

The network is the property of the private companies that built it. It does not belong to the government, or to the “people.” These are private networks, built with private capital, and the owners of the networks should be free to direct their deployment and use with a minimum of interference.

Today, telecom and cable companies are aggressive, competitive risk-takers. They are making enormous investments and offering new products and services. They should be free to try new things, to test a new service in a particular test market without being required to deploy it everywhere. Let them experiment. Let them expand where opportunity presents itself and contract where opportunity no longer exists.

Some might pursue a strategy of providing service without any management, which conceivably would be less expensive but also less reliable and efficient. Others may provide heavily managed networks because that is what the owners want done with their property to maximize investment and the return on investment. Regardless, government need have no role in these decisions absent very unusual circumstances.

The Correct Motivations

These sorts of network management tactics provide for an even-handed provision of service that gives every user roughly the same experience – even bandwidth hogs who consume far more bandwidth than an average user, that is, heavy peer-to-peer users. Given that most providers charge a convenient flat rate to consumers, all customers in that situation have some expectation of a similar access experience. The owners of these private networks manage them to maximize the quality of the experience for all participants and often see this role as their responsibility.

Of course the greater, and proper, motivation is to maximize value to the consumer so that in turn the company via its management is maximizing the value, or return, for the owners of the system – the corporate shareholders.

The current environment encourages providers to be agnostic about the content of the material being delivered across the system. In most cases, because the process is fairly mechanical, specific content is not blocked, but rather the content is managed so that all users can enjoy their experience. For example, what good is viewing a video if it is not continuous, or if voice communication was not a continuous flow in a timely way?

In this environment, some service providers even enable those who compete against them to do so. So, for example, a non-facilities-based voice communication provider can “ride on top” of the facilities-based provider's services to compete with them in the provision of voice communication.

The simple fact is that owners are motivated to manage their networks so that all users are able to gain from the network what they are paying to receive. As service providers find that they can drive greater value from their networks as they no doubt will and should, the environment may change to bring greater value to legitimate consumers. As consumers are willing to pay more for greater protections, for example, then the provider should be allowed to provide these services, say a safer environment for families and the consumer should have the option.

Innovation – should that be regulated?

As technology and innovation rapidly move forward legislators and regulators be concerned about losing control. But control should never have been a goal in the first place. Rather, the goal should be to find ways to allow innovation and competition to proceed without government intrusion.

Regulatory bodies should restrain themselves to only those instances where public health and safety requires it, or, rarely, to strengthen competition when new entry into the market is impaired by some factor other than normal costs, and perhaps in some other rare circumstances. In communications some intervention might be required where real bottlenecks exist as in transit; but this problem would only be exacerbated by forcing networks to be nothing more than “dumb pipes.”

Regulation would have the unintended (or perhaps intended) consequences of preventing the addition of needed intelligence into next-generation networks. There are many technical reasons why network operators need to prioritize packets and partition bandwidth. Typical Internet traffic doesn't need the same packet priority as do video or voice packets. Emergency services and first responders should also have their traffic receive higher priority than an Internet-connected toaster. Prohibitions against managing a network, or net neutrality regulations, could have the effect of requiring that packets from the Internet-connected toaster receive the same priority as voice packets from first responders.

The Best Managers

In the end the best managers of their property, the networks, are its owners, or in some cases their proxies – management as elected by the shareholder owners.

They might decide that consumption-based billing is the right way to leverage their networks to the greatest advantage of their customers and hence the greatest advantage of the owners. They might decide that access should be more expensive at peak usage times, as electrical systems do today. They may decide that the “all you can eat” packages provided today are the best. Regardless, these are not decisions that should be left to regulators. Only the very arrogant would believe that they could better manage a business than the people who build, pay for, and reap the rewards of most efficiently and effectively managing the systems today.

It is vital to our dynamic economy that the forceful and strong hand of government does not prevent network operators from experimenting with new and novel business models. If their new business models succeed, the economy as a whole will benefit. But even if their new business models fail, the economy as a whole will still benefit through observation and learning from the experiment. Net neutrality regulations would definitely have the effect of preventing network operators from attempting and pursuing experimentation new business models, including never-before-tried ways of providing content.

The wireless market in particular has been a hotbed of experimentation with new business models, including pricing plans and content marketing. Without a doubt this business model innovation in the wireless sector has occurred because of a lack of suffocating regulation.

Economic realities

Internet bandwidth, like every other commodity, is not infinite. There is never enough of something for everyone to have as much of it as they want. So Internet bandwidth, like all commodities, must be subject to the management of markets. Other networked resources, such as water, and electricity, are allocated through market forces, and we allow those network owners to manage their networks in the best interests of all of their customers. We should allow no less for Internet bandwidth, unless somehow we decide that Internet bandwidth is somehow a more critical commodity than water and electricity, which seems unlikely.

Because, like everything else, Internet bandwidth is a finite commodity, it is subject to Say’s Law, which says that “supply creates its own demand.” Thus, an abundant supply of bandwidth will create abundant demand, and thus there will NEVER be “enough” bandwidth. However much bandwidth we are able to bring on-line, there will always be a need to manage it efficiently. In other words, as expanded resources are made available so too will people find clever and useful ways to use those expanded resources.

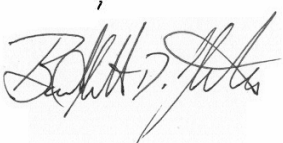
So, the assumption that we will, at some point, reach “enough” bandwidth so that everyone can have as much as they want is false, and thus bandwidth will always need to be managed efficiently.

Conclusion

The choice is clear. The alternatives are a government-mandated, regulated, dumbed down interconnection of “pipes,” or the continuation of the robust innovation, growth and investment that have been the hallmarks of the “Internet boom” for well more than a decade.

Those who took the risk, invested heavily in building networks, and own them must be allowed to operate them as best serves the needs of their customers. If they do not, then those people will lose their investment. Whether, and how, networks are managed should be a decision exclusively left to the owners of those networks. No regulatory prohibition against network management practices should be considered. Additionally, requiring disclosure of the very means in which providers protect consumers from criminals would leave consumers at the mercy of those with ill intentions. No requirement to disclose specific network management techniques should be considered.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Bartlett D. Cleland', written in a cursive style.

Bartlett D. Cleland
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