WRITTEN STATEMENT OF
SUSAN CRAWFORD, VISITING ASSOCIATE PROFESSOR, YALE LAW SCHOOL

HEARING ON:
NET NEUTRALITY AND FREE SPEECH ON THE INTERNET
BEFORE THE COMMITTEE ON THE JUDICIARY, TASK FORCE ON
COMPETITION POLICY AND ANTITRUST LAWS
UNITED STATES HOUSE OF REPRESENTATIVES
March 11, 2008

WRITTEN STATEMENT OF
SUSAN CRAWFORD, VISITING ASSOCIATE PROFESSOR, YALE LAW SCHOOL
HEARING ON:
NET NEUTRALITY AND FREE SPEECH ON THE INTERNET
BEFORE THE COMMITTEE ON THE JUDICIARY, TASK FORCE ON
COMPETITION POLICY AND ANTITRUST LAWS
UNITED STATES HOUSE OF REPRESENTATIVES
March 11, 2008

Chairman Conyers, Ranking Member Smith, and Members of the Committee:

Thank you for inviting me to testify. It is an honor for me to be here.

By way of background, I practiced law for 13 years in Los Angeles and Washington D.C., working with Internet-related companies. In January of 2003, I left WilmerHale and began my current job as a professor of law, teaching communications law and Internet law. I am a member of the board of the Internet Corporation for Assigned Names and Numbers. In the fall of 2007 I was a Visiting Professor at the University of Michigan Law School, and I am currently a Visiting Professor at Yale Law School.

I understand that the principal reason you have asked me to come before you today is to discuss the relationship between "network neutrality" and First Amendment values. The question is whether in the current market for Internet access network providers should be allowed to discriminate based on the source or origin of (or content in) particular packets.

I think there are three key points to keep in mind:

• First, that the stakes are very high for this discussion because the Internet is becoming the basic communications network on which all Americans rely for both personal and business reasons;

• Second, that there are insufficient protections in place for speech online, because the current crop of Internet access providers is an unregulated duopoly with enormous market

power that has every incentive to discriminate against speech (and products and services) they believe is undermining their business plans;

• Third, given the legal swamp into which Internet access currently falls, Congressional action is needed to ensure, in advance, that access to the Internet is provided in a non-discriminatory fashion.

At the moment, protections for online speech are murky at best and provide the opportunity for discretionary censorship – harming innovation, speech, and liberty – by extremely powerful private infrastructure actors. The mere existence of the possibility of such censorship is enormously harmful to both speech and economic growth.

I will discuss each of these three points briefly but first want to put the network neutrality debate into context.

The Context for Network Neutrality

The idea of "common carriage" – serving all customers without discrimination – is not new. These principles have been part of the fabric of general-purpose communications and transport networks for a very long time.

Indeed, for centuries common carriage principles have played an important role in the basic infrastructure services of transportation and communications. In exchange for not holding the providers of these services liable for the content of the communications they carry, we have held these services responsible for providing nondiscriminatory assistance to all customers who are willing to pay. Even if infrastructure providers are privately owned, they have been commanded *not* to use their discretion in providing services.

For example, even before the Federal Communications Commission was created, courts and state legislators required telegraph operators to serve all customers, including other telegraph companies, without discrimination. Telephone operators, when they came on

the scene, were required to act as common carriers. This obligation is not new, and it has allowed us to put our general communications systems in the hands of private, for-profit companies without worrying about discrimination and censorship.

The Internet is the first global, electronic, general-purpose communications network.

We used to assume that there was a necessary association between a particular form of infrastructure (like telephone and cable wires) and a particular functional capacity. So we assumed that each wire could do only one thing, and we had to have a separate network for each thing we wanted to do. This led to business models where a network owner was also the provider of whatever particular service—phone, cable, etc.—was carried over that particular kind of wire.

The Internet has completely overturned that assumption. The Internet is best understood as a collective agreement to use a particular language (the Internet Protocol) when connecting computing machines to telephone, fiber, and cable lines that are interconnected around the world. The incredible innovation of this language was to allow computers or other devices connected to the Internet (including telephones, televisions, fax machines, and TiVOs) to send and receive information of any kind via data streams over many different types of physical wires or fibers. The Internet Protocol can run over anything. And any different use (phone calls, television, news) can be communicated over the Internet Protocol. These uses may be provided by the network infrastructure owners, or they may be provided by other people (including any one of us). Phone services can come from Skype—over the Internet. Video on demand can come from Apple's online movie rental store. Television shows can come directly from the servers of users. And so on.

"The Internet" is thus not the same thing as Comcast's, Verizon's, or AT&T's lines and fibers (or wireless connections). Though that infrastructure is important, these actors are merely providing one set of connections that allow users and businesses to connect to the constant, dynamic interaction and communication that the Internet Protocol facilitates.

The Internet is also not the same thing as Web pages with pictures and videos on them. That is the World Wide Web, which is just one particular application that runs on top of the Internet. The Internet, this agreement to use the Internet Protocol, is much more than the World Wide Web – it can be used to send data, email, voice calls in digital form, and more. It is, again, a general-purpose communications network.

It is very different from the other special-purpose networks we have seen, because it allows for so much group interaction and publication to the world of businesses and thoughts – without the permission of the carrier.

The birth of the Internet relied heavily on extensive government intervention requiring that telephone companies provide services on a common carriage basis. The explosive growth and popularity of the Internet took these phone companies by surprise, however, and they became unhappy with requirements to provide flat-rate, open access to online resources.

Today, in this age of deregulation, there are no legal limitations on how Internet access providers may provide access. They are free to discriminate, and we have already seen this happen with Comcast's handicap of certain applications. This is just the tip of the iceberg.

You may be thinking, "Common carriage – how old-fashioned! This is the new world, not the old one." My purpose in being here today is to say that we need neutral access to the Internet for the new world – not just for application providers but also for users. The "people formerly known as the audience" in America need jobs, and they will be finding them online through the interactive Internet. They'll also be creating their own communications content. We cannot even imagine what they will be doing, and we must not let a few private actors act as gatekeepers that stand in their way. Common carriage is actually very Web 2.0.

• The stakes are very high.

As the difference between a "phone," a "television," and a "cable system" vanishes, the Internet is taking over the functions of all of the communications networks we used to have. *Each of the vertically-integrated network access providers in this country sees this change as a threat.* Telcos want to offer their own television services, music services, and "premium web content." The open Internet could become the greatest competitor they have ever seen—precisely because it is not one competitor, but a general-purpose vehicle for thousands of entrepreneurs across the country to offer innovative new products.

Put very simply, each of these dominant network access providers wants to have the freedom to act as an editor or gatekeeper for its own commercial purposes. They want to call their edited services "Internet Access" – but it really is not that. It is more like "more cable programming"—an edited and constricted communications offering.

It is useful to remember that there were minimal vertically-integrated services in the telephone/telegraph world. But our current network providers want to avoid being treated as communications providers -- telcos and cablecos today see the potential for nearly unlimited vertically-integrated services (that they control singlehandedly) in the high speed internet-access market.[1]

---

[1] The AT&T/Yahoo! terms of service: http://edit.client.yahoo.com/cspcommon/static?page=tos

"AT&T Yahoo! High Speed Internet and AT&T Yahoo! High Speed Internet U-verse Enabled are information services. These Services combine Internet access and applications from AT&T with customized content, services and applications from Yahoo! to provide Members with high-speed broadband access to the World Wide Web."

"The Service includes a rich collection of resources provided by AT&T Yahoo!, including various communications tools, forums, shopping services, search services, personalized content and branded programming that Yahoo! provides through its network of properties which may be accessed through various media or devices now known or hereafter developed, and AT&T's broadband and narrowband Internet access service for retail consumers. Included with your basic membership fee, you receive certain services and content. Unless explicitly stated otherwise, any new features that augment or enhance the current Service, including the release of new Yahoo! properties, shall be subject to these TOS."

We are, right now, deciding what the future of the Internet will be for all Americans. We should not take this lightly. We are confronted with a choice: should we have a general-purpose network that is nondiscriminatory and available to all (like a highway linking a rural area to a big city) or should we have a few special-purpose networks that are "managed" for the commercial purposes of the carriers (like a ride in Disneyland). The stakes are very high indeed – this is not just about Comcast's throttling of BitTorrent or Verizon's treatment of "unsavory" short codes. This is about the future of communication itself.

• There are insufficient protections in place for speech online.

You might be thinking that the market will ensure that a non-discriminatory provider of Internet access will arrive on the scene if that is what users want. But we do not have a functioning competitive market for Internet access. Instead, we have regional duopolies (usually one cable provider and one telco) providing Internet access to 98% of the country. Prices are not going down and nondiscriminatory Internet access services are not available. In fact, a JP Morgan analyst named Jonathan Chaplin recently made clear that cable and telephone companies are doing their best to avoid a price war:

> "The broadband market is a duopoly," he said. "That should be a stable pricing environment. It's in their interests to compete rationally and preserve the economics of the market."

This is the "orderly marketplace" beloved of the early 20th-Century trusts and combinations.

The breakup of Ma Bell has effectively been reversed. There are only three Baby Bells left: Verizon, AT&T, and the much smaller Qwest. The two largest cell phone companies, Verizon and AT&T, command more than half the market. On the wireline side, Verizon and AT&T have carved up the country into exclusive territories, each one

covering half the country. Two cable companies, Comcast and Time Warner, control half the cable television market. In nearly every town there is only one cable company.

This lack of competition provides the opportunity for discrimination. The few large carriers providing Internet access have both the market power and every incentive to effectively turn the Internet (as viewed by Americans) into a managed, proprietary network – monetizing every transaction and optimizing the network on billing. We have already seen Comcast doing its best to avoid competition from a more-efficient mode of video distribution using its network, by secretly acting to terminate communication sessions. We would have even more evidence of this kind of sporadic abuse of power by a gatekeepers/censors like Comcast if we were able to have researchers watching what was going on. As it is, we already know that Comcast (and others) are capable of using techniques that the Chinese government also uses to "purify" the Internet.

After-the-fact rationalizations for "management" of Internet access ("discrimination" using a more neutral name) are so easy to craft. The real danger to speech and innovation is the pervasive threat inherent in the ability to "manage." A speaker cannot know if her speech will be disapproved of. An application developer cannot attract investment, because the network provider may degrade the functionality of the application at any time – imagine a highway designed to favor only particular kinds of cars at particular moments, and then imagine the frustration of an auto entrepreneur with a new kind of design ready for funding. Arbitrariness, by itself, is enormously threatening to speech and innovation, and has the potential for suppressing particular points of view.

You may say, well, if the market isn't functioning let antitrust authorities deal with the problem. But antitrust regulators will, right now, defer to the decisions of the special-purpose regulator. (Even if they did get involved, they have a mixed record in highly technical environments.) At the moment, our special-purpose regulator – the FCC – is in turn generally deferring to the decisions of the potentially arbitrary gatekeepers. These gatekeepers, in turn, are probably not state actors, so it is unclear whether they are

constrained by the First Amendment. No one is protecting the speech that should flow over general purpose communications networks.

- **Congressional action is needed.**

We have a Telecommunications Act that does not fit reality. All of these Internet-related questions are being dealt with under the FCC's assertion of "ancillary jurisdiction" – in other words, the FCC says that because the Act puts them in charge of wires and radios, and the Internet is accessed through wires and radios, they have implicit authority from Congress to regulate the Internet. But we are in a featureless swamp – Congress said little expressly about the Internet in the 1996 Act and has given the Commission zero guidance as to how to proceed when deciding whether nondiscrimination rules should apply to Internet access providers. There simply is no specific Congressional mandate on this issue. We should not allow a key source of America's economic growth to be subject to such accidental, ad hoc authority.

In 2005, in response to great concerns about net neutrality, the Commission issued a policy statement saying that consumers were allowed to access content and run applications of their choice. The statement is fine as far as it goes, and I am personally hopeful that the Commission will use it effectively in responding to the current crisis with Comcast. But carriers like Comcast, AT&T, Verizon, and the others claim it is subject to an apparently enormous, principle-swallowing exception: that anything the network provider does can be justified if it is for "reasonable network management." As I have explained, the risk is that almost anything – including discrimination for commercial reasons as well as viewpoint-related reasons – can fit within "reasonable network management." Indeed, the network operators take this position, and also claim the FCC lacks the jurisdiction to enforce the Policy Statement.

So now I want to return to where we began, with First Amendment values. The First Amendment is a special instance of a general American concern for liberty, speech, and innovation. Liberty, speech, and innovation are connected. When we build general-

purpose communications systems, we build liberty into them. We did it with the postal service, the telegraph, and the telephone. We did it with highways. The architects of the Internet built liberty into the Internet Protocol, which is designed not to discriminate against any applications that use it, and to operate using any form of transport. E-mail, instant messaging, the World Wide Web, and now Internet video have become important facilitators of speech and interaction, and none of these world-changing uses of the Internet was developed by the enterprises that now control Internet access. The innovation at stake here is innovation in our ability to communicate with one another.

For certain kinds of basic inputs to communication and transport, our American First Amendment values require that we all have the opportunity to speak (and invent) without being censored by public or private gatekeepers. We are now moving our communications online, to a new general-purpose communications network, and our common concern for liberty, speech, and innovation requires that we keep access to the Internet neutral.

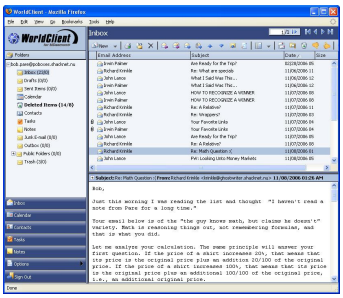
Communications policy has always been part of our national industrial policy, and is now more important than ever. Congress now has the opportunity to adopt a coherent approach to Internet access that takes proper account of the importance of the diversity of the communications these dominant network operators are carrying. Congress can help by acting decisively to separate control over transport infrastructure from control over provision of communications – the overall goal of net neutrality. This will promote free speech, foster innovation, and will drive broad economic growth.

There are many paths available towards this goal. The recently-introduced Internet Freedom Preservation Act, could be a useful step. We will need eventually to re-write the Communications Act to take account of the convergence of communications platforms and to ensure that the companies that are providing basic, general-purpose communications services such as Internet access do not discriminate or leverage their control over this general-purpose service into other markets. I urge this Committee to

play a role in crafting legislation that will support the long-term interests of all Americans.

Thank you.

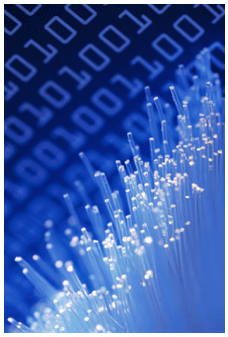
[attachment]



Email

Video

Voice



Data

Internet on a large screen – for everything