

**S. 2686, THE COMMUNICATIONS, CONSUMER'S
CHOICE, AND BROADBAND DEPLOYMENT ACT
OF 2006 (PART II)—NET NEUTRALITY
AND INTERCONNECTION**

HEARING

BEFORE THE

**COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION**

UNITED STATES SENATE

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

MAY 25, 2006

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ONE HUNDRED NINTH CONGRESS

SECOND SESSION

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CONTENTS

| | Page |
|--|------|
| Hearing held on May 25, 2006 | 1 |
| Statement of Senator Allen | 43 |
| Statement of Senator Boxer | 65 |
| Statement of Senator Burns | 6 |
| Statement of Senator DeMint | 44 |
| Statement of Senator Dorgan | 3 |
| Statement of Senator Inouye | 2 |
| Prepared statement | 3 |
| Statement of Senator McCain | 1 |
| Statement of Senator Bill Nelson | 6 |
| Statement of Senator Pryor | 9 |
| Statement of Senator Snowe | 7 |
| Prepared statement | 8 |
| Statement of Senator Sununu | 4 |

WITNESSES

| | |
|---|----|
| Cochetti, Roger J., Group Director for U.S. Public Policy, Computing Technology Industry Association (CompTIA) | 53 |
| Prepared statement | 55 |
| Comstock, Earl W., President/CEO, COMPTEL | 58 |
| Prepared statement | 60 |
| Misener, Paul, Vice President, Global Public Policy, Amazon.com | 9 |
| Prepared statement | 11 |
| Regan, Timothy J., Senior Vice President, Global Government Affairs, Corning Incorporated; on Behalf of Telecommunications Industry Association ... | 23 |
| Prepared statement | 25 |
| Scott, Ben, Policy Director, Free Press; and on Behalf of Consumers Union and Consumer Federation of America | 33 |
| Prepared statement | 35 |
| Tauke, Hon. Tom, Executive Vice President, Verizon | 19 |
| Prepared statement | 21 |

APPENDIX

| | |
|--|----|
| Brenner, Daniel, Senior Vice President of Law and Regulatory Policy, National Cable & Telecommunications Association, prepared statement | 81 |
| Response to written question submitted by Hon. Jim DeMint | 89 |
| Pies, Staci L., Vice President of Governmental and Regulatory Affairs, PointOne; President, VON Coalition, prepared statement | 84 |
| Smith, Hon. Gordon H., U.S. Senator from Oregon, prepared statement | 81 |

**S. 2686, COMMUNICATIONS, CONSUMER'S
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THURSDAY, MAY 25, 2006

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 11:15 a.m. in room SD-106, Dirksen Senate Office Building, Hon. John McCain, presiding.

**OPENING STATEMENT OF HON. JOHN MCCAIN,
U.S. SENATOR FROM ARIZONA**

Senator MCCAIN. Good morning. Today's hearing focuses mainly on "net neutrality," a term that was rarely used by average Americans just months ago.

Could I mention that the distinguished Chairman of the Committee—of the full Committee, Senator Stevens, is not here because he is with his fellow veterans of the Flying Tigers of World War II, very appropriately. He has a scheduled meeting with them, and we obviously honor them, as well as him, for their service, as well as our distinguished colleague from Hawaii, who is the Ranking Member of this Committee.

Today's hearing focuses mainly on "net neutrality," a term that was rarely used by average Americans just months ago. In fact, before this year, fewer than 300 newspaper articles were written about net neutrality. By contrast, just in the last month, almost 500 articles have been written on net neutrality, along with about 1,800 blog entries.

The growing attention paid to net neutrality befits the seriousness and the difficulty of the matter before us. The Internet has traditionally been a neutral network of pipes that distributes packets of data in generally the same way regardless of whether it's e-mail, voice communications, video transmissions, or website content. Some refer to this model as the "dumb pipe," because it doesn't choose what it carries. But the so-called "dumb pipe" has resulted in an abundance of innovation. Everything from search engines to e-mail to instant messaging has resulted largely from this network architecture. Current proposals to change how the network works may impact deeply on how we use this essential medium of communication and commerce.

Over time, we have understood that network operators do not—do need to prioritize certain data that flows through their networks. For example, the failure of a 911 emergency call through a Voice-over-IP application would result in great injury or death. We know that networks must be able to ensure such critical communications, as well as protect against threats such as spam and spyware. Practical need and technological advances have, thus, led to innovations inside the network, which many believe are just as important as the advances in services and devices connected to the Internet on the edges.

I, like most Americans, strongly support innovation. I believe the network operators should get a return on their infrastructure investments, which will encourage more development of broadband capacity in the U.S. I also firmly believe that network operators should not stifle the free flow of information that has been the essential component of the Internet, now such a fixture and core component of our social, economic, and political lives.

Prohibiting consumers, or significantly limiting them, from legitimate use of the Internet is anathema to the principles of a democracy, and it goes contrary to our free market economy. It may also jeopardize the tremendous innovation that has been such a key part of the Internet's growth and development.

We also strongly support robust competition. Unfortunately, today the broadband market is one where too many consumers have only two, sometimes one and even no, broadband service options. According to the Federal Communications Commission, a quarter of all zip codes have two or fewer broadband service providers, and many observers believe that there's much less competition than the FCC figures suggest. Without significant competition in the broadband market, network operators may be tempted to exercise market control that hurts consumers.

I hope that my colleagues will join me in promoting greater competition by encouraging municipal broadband initiatives and the emergence of new technologies, such as broadband-over-powerlines and wireless services.

Last, on a separate note, I understand that, this morning, Treasury Secretary John Snow announced that the IRS will not collect the Federal excise tax on long-distance telephone services. This antiquated luxury tax was enacted in 1898 to fund the Spanish-American War and has far outlived its purpose.

I introduced bills in the 106th and 107th Congress, along with others, to repeal this tax, and I look forward to consumers seeing immediate savings on their long-distance bill.

Senator Inouye?

**STATEMENT OF HON. DANIEL K. INOUE,
U.S. SENATOR FROM HAWAII**

Senator INOUE. Thank you very much.

As noted, today the Committee examines topics that are critical to the future of competition in communications. Mr. Chairman, my voice is not up to par, so may I yield to my friend and ask that my statement be made part of the record?

Senator McCAIN. Thank you, Senator Inouye, and your full statement will be made part of the record.

[The prepared statement of Senator Inouye follows:]

PREPARED STATEMENT OF DANIEL K. INOUE, U.S. SENATOR FROM HAWAII

Today, the Committee examines topics that are of critical importance to the future of competition in communications markets and to the preservation of an open and free Internet.

While the term “network neutrality” may be new to some, the principle of non-discrimination that it represents, has stood as one of the founding tenets of communications law for some time. It has been central to the development of the Internet and has fueled the explosive growth in the applications and services enjoyed today by millions of Americans. If we are to continue on this path in promoting further innovation, we must ensure that this very old principle remains a central part of communications law in the new information age.

Towards that end, I recently cosponsored legislation introduced by my colleagues Senators Snowe and Dorgan, to reaffirm our commitment to innovation and openness by establishing enforceable rules that will prevent unfair discrimination by network operators.

In addition to our concerns about fair competition on the Internet, we must not lose sight of other competitive issues such as the need to preserve essential rights of interconnection for competitive communications providers and to restrain market power in special access markets, where consolidation among the Bell companies is only making a bad problem worse.

To assist us in our review of these issues, I have asked my staff to circulate a discussion draft to Chairman Stevens, my colleagues, and to other interested parties in an effort to suggest reforms that will promote competition in all markets and will preserve America’s ability to compete in a global information economy. I look forward to working with my colleagues on these issues in the days ahead.

But today, our time is short. As a result, I welcome our witnesses and look forward to their testimony.

Senator McCAIN. Senator Dorgan?

**STATEMENT OF HON. BYRON L. DORGAN,
U.S. SENATOR FROM NORTH DAKOTA**

Senator DORGAN. Mr. Chairman, thank you very much.

First of all, I listened to your statement, Mr. Chairman. It’s not surprising at all, and I think all of us understand, that there has been little discussion about net neutrality in the press and in the blogs and so on. And there’s a good reason for that, I think. Until the Federal Communications Commission, some while ago, decided that broadband—for example, broadband services—would not be classified as telephone services, and, therefore, not a part of the common-carrier rules or the nondiscrimination rules that would normally have applied had that ruling not existed—I think, when that happened, then the question began to be raised, well, what rules, if any, do exist? Are there no rules at all?

I don’t view this as regulation. I was—this morning, as I was getting ready for work, I had the television on, and I saw a television advertisement, I assume, that was beamed exactly for the audience it reached, myself and perhaps others who were getting ready for work. It was by a consortium of people saying, “What they’re trying to do in the U.S. Congress at the moment is to regulate the Internet, something called ‘net neutrality.’”

In fact, this is exactly the opposite. Senator Snowe and I have introduced a piece of legislation, and the purpose of it is to make certain we continue in the future to have an open Internet—Internet freedom, an open Internet. The point is, consumers ought to be able to get any content they wish to get over the Internet without asking permission from anybody, from any network operator. And

the consumers ought not be pushed and pulled by the ability, or the muscle, of any network operator to move them into certain corners or persuade them into certain areas.

I believe we want to continue to have the open architecture of the Internet. It is true that we've had almost breathtaking innovation occur in this country. It's pretty unbelievable what has happened.

I don't know how much time we have, but if I might just tell a very short story. I went back to my hometown, to the little house that I grew up in, a town of 300 people, and I knocked on the door and asked the woman if I could see the home I grew up in. I hadn't seen it for decades, and just look inside. She said, "Sure." I went inside, and this woman had a little contraption on her cupboard in the kitchen, and she was taking a photograph of something with a camera attached to this little white contraption with an arm hanging out and a piece of jewelry hanging down.

I said, "What are you doing?"

She said, "Well, I'm photographing this piece of jewelry." She said, "I sell on eBay, on the Internet."

And I said, "Really?"

"Yes," she said, "I sell on eBay, and I have a business here out of my home."

And I said, "Do you make money?"

"Yes, I do pretty well. It's my job."

And she ships out of a little town of 300 people and has a business, and—because the open architecture of the Internet serves New York City, it serves the smallest city, the largest city; it serves the smallest customer and the largest customer.

I'm not—this is not an advertisement for eBay, because I bought a pressure cooker on eBay once that I shouldn't have bought, so I'm not real happy with these online auctions.

[Laughter.]

Senator DORGAN. But my point is—my point is, we have empowered consumers through the open architecture of the Internet. The entire purpose of the legislation is for an open Internet—not regulation—an open Internet. If that's what we achieve as a result of deliberation by Congress, we will have, I think, retained the flavor of the Internet that encourages innovation. And that will be a very significant accomplishment.

Mr. Chairman, I yield.

Senator MCCAIN. I thank you, Senator Dorgan. And I would mention to my colleagues that we will be having a vote here pretty soon, and then another vote after that, which is going to make this hearing rather difficult to have any continuity, so I would hope that maybe their remarks could be relatively brief.

Senator Sununu?

**STATEMENT OF HON. JOHN E. SUNUNU,
U.S. SENATOR FROM NEW HAMPSHIRE**

Senator SUNUNU. Thank you, Mr. Chairman.

You know, I'm concerned that we have, at last, reached the point that comes all too often, where legislators—Congress, in this case—look out and see something that has thrived, that has been successful, that has created economic opportunity, that—from which has

derived new services, new consumer products, new methods of communication; new methods of access to people that never had access to information, to education, to products and services. And, in our wisdom as legislators, we say, "We'd better start regulating it, because it's just too attractive an opportunity to pass up." That is what we do, we pass laws. And when something is big and large and important and a source of success that sometimes we envy, unfortunately, I think that's where we end up.

I think we need to recognize and understand that this is the Internet, broadly speaking. It is something that has succeeded, has done all the things that I just described, effectively with no rules whatsoever. There are standards, there are protocols, but no one has forced anyone to participate in any particular way, to sell to people in a particular way, to market to people in a particular way, or to develop new products in a particular way.

And what we're talking about here, at least in regards to the legislative proposals that are before us, some of them, is regulation. I mean, we should be honest about that. If you are statutorily mandating access, mandating marketing practices, mandating the existence or prohibition of certain pricing mechanisms, you are regulating the Internet.

Now, you may argue, and many may argue, it's in the public interest to regulate the Internet; that it somehow would create greater competition if we regulate the Internet, although the number of instances where Congress passes new laws and new regulations that result in greater competition are few and far between. Usually we're passing laws to improve competition, because some law we passed before has stifled competition. That's not what we're talking about here. We have not done so with the Internet, and we shouldn't do it now. So, you might—someone might genuinely believe there's a reason to regulate the Internet, but that is not what we're talking about.

What we have today is a situation where the FCC has put forward principles for access and connectivity. I think they do reflect a consensus. They may or may not be exactly what any member of this committee would craft, but I'll suggest and stipulate that they reflect consensus. Some of the very largest providers have agreed to those principles, to implementing those principles in the future. And what we're left with is a situation where certain Members of Congress, including Senator Dorgan, in a good-faith effort, have put forward a law, regulation, that is really predicated on a prediction of what communications companies might do and a prediction of what the market impact of that choice might be. So, it's not just one area of speculation, but it's two—what might they do, and what might the market reaction be—and I think that is not a sound basis for moving forward with regulation.

I think this is an issue of concern. We don't want to see anti-competitive practices. We don't want to see restrictive behavior that—where someone uses their monopoly position, either nationally or locally, to somehow prevent this kind of access, to undermine the principles that the FCC has put forward. But we are not at that position yet, and we can always have the opportunity, and take the opportunity, to regulate if we see that for some reason the market mechanisms have ultimately failed. But I think it's very

hard to argue that market mechanisms have failed here. It's very difficult to predict whether or not they will.

The history of this thing we call the Internet is absolutely incredible in its resiliency, its flexibility, and its ability to surprise anyone that tries to forecast or predict or prognosticate as to what will happen next. And that's the beauty of it. That's the source of its vitality and the source of the impact that it has had on so many lives. And if we start regulating it now, in a haphazard way, we will not kill the goose that laid the golden egg, but I think we'll create a great many unintended consequences that we'll regret. That's problematic enough, because we all care about ourselves and our jobs and how we view the job that we've done. But, more importantly, the country and consumers in America will have suffered.

Thank you, Mr. Chairman.
Senator MCCAIN. Senator Nelson?

**STATEMENT OF HON. BILL NELSON,
U.S. SENATOR FROM FLORIDA**

Mr. NELSON. Thank you, Mr. Chairman. And I'll be very brief.

I just want to say that as we approach this issue, we need to encourage further broadband deployment if we want to compete worldwide. That's just a basic—nail that down. But then, on this issue of net neutrality, I believe that Congress needs to craft policies that encourage investment in broadband networks, and the broadband network providers need maximum flexibility to innovate and to manage high-intensity network traffic.

On the other hand, I understand that the anticompetitive conduct could arise if network owners become Internet gatekeepers. Consumers might be hurt under those circumstances, if network owners unfairly discriminate against Internet content.

And so, at this point, I can tell you that I don't know yet how to solve this net neutrality issue, but I know that this committee has to work together to agree on a set of rules.

On another issue, you know of my interest in ensuring that Internet phone providers offer E-911 services to their broadband subscribers. And I believe that any net neutrality rules must ensure that those digital packets carrying 911 emergency calls get top network priority under all circumstances. This is a critical public safety matter, especially after what we've been through over the last several years. And so, we need to address this net neutrality issue with great caution because of the enormous implications to our global competitiveness, as well as for consumer choice.

Thank you.
Senator MCCAIN. Senator Burns?

**STATEMENT OF HON. CONRAD BURNS,
U.S. SENATOR FROM MONTANA**

Senator BURNS. My statement will be very short. I came to listen to the folks at the table.

This net neutrality thing, let's hear from them, because it's already obvious around this table we haven't solved it here. So, let's go to—let's go get some more information.

Thank you very much. I'll make mine in the form of the questions, sir.

Senator MCCAIN. Senator Snowe?

**STATEMENT OF HON. OLYMPIA J. SNOWE,
U.S. SENATOR FROM MAINE**

Senator SNOWE. Mr. Chairman, thank you. And I only ask unanimous consent to include my entire statement in the record. And I just—

Senator MCCAIN. Without objection.

Senator SNOWE.—want to express my appreciation to Senator Dorgan, in particular, for working closely to craft the legislation that we have introduced, to preserve the freedom of the Internet, as well as Co-Chair Inouye for cosponsoring this legislation.

The fact of the matter is, Mr. Chairman, this is going to be a fundamentally different dynamic with respect to the Internet. And the essence of our legislation is to protect Internet freedom.

Net neutrality is, as some have said, the first amendment of the Internet and the basic idea that all content, applications, and services will be treated equally and fairly on the Internet. And what we're responding to today is exactly and precisely what the FCC did in that respect, which was basically to do away with the non-discrimination safeguards that have been in place since the inception of the Internet. That's what has changed the dynamic that we're dealing with here today.

Our legislation simply restores those protections to ensure that we can allow the Internet to continue to flourish and to thrive. If you think of the worldwide revolution that has developed as a result of the Internet, the technological revolutions that are allowed, you know, the spawning of new businesses, spreading of democracy around the globe, giving access, infinite access, to information for consumers, it has grown exponentially. And if we do not address this issue in preserving the Internet as it exists today for consumers to access the Internet, you know, to make their choices whenever, wherever they want, we're going to fundamentally alter the landscape. And if you think that there's a hue and cry when it came to media consolidation, this will, I think, exceed that, when 73 percent of the households in America have access to the Internet.

So, what we're trying to do is to restore what we have—we had designed with the Internet, which was to allow it to flourish, to allow it to do all the things that consumers take for granted today, by being able to access whatever website they want, or to, you know, make some decisions about whether or not they're going to watch online videos or podcasts or search or e-mail or instant messaging. What they're assuming is called network neutrality and the principle that has made the Internet what it is today. And it should be open and free and restricted by no one.

And, unfortunately, if Congress fails to act on this very question, the foundation of the Internet's success will be undermined, and that's why we've introduced this legislation, to respond to the FCC and what it has done. Yes, it has identified principles, but it's not going to preserve the nondiscrimination standards that are so essential. We will have a two-tiered system. We'll have those—you

know, the information superhighway will be for those who are wealthy and the favored. And those who aren't favored, who can't pay the high prices for that access, are going to be relegated to what has been described as a "dirt road" on the Internet. We're going to create two tiers, of the haves and the have-nots, and that's not what America, not to mention the world, you know, is accustomed to with respect to the Internet. That's what's at stake here, Mr. Chairman, and it's no less than that. And it's the consumers that have been dictating the marketplace, choosing the winners and losers. But if we have a gatekeeper, it's going to be fundamentally different than what we know today, what Americans know today; and you're not going to have entrepreneurship, and innovation and technology developing at the pace in which it is today. It will be very, very different. And I think that consumers ought to decide, you know, which—who succeeds and which—who fails, but not gatekeepers, determined by the price that you pay to access the Internet. And that's what it's all about.

I hope that we are able to work out our differences on this question. I think many of us agree on the common goal, and the question is how we go about it. But if we fail to take action, then I think that we're going to clearly see the consequences of that in a very short time. And once, you know, we go down this path, I can only assure you it'll be very difficult to recover and retreat. It's going to be very different. It took 10 years in which to even consider rewriting the Telecommunications Act. I hesitate to think what it'll require if we fail to do, you know, anything on this question, where we'll be in 10 years in being able to say, "Well, no, I think we've got to change course." It'll be too late.

Thank you, Mr. Chairman.

[The prepared statement of Senator Snowe follows:]

PREPARED STATEMENT OF HON. OLYMPIA J. SNOWE, U.S. SENATOR FROM MAINE

Mr. Chairman, thank you for holding this hearing today to examine net neutrality. I applaud the work that Chairman Stevens and Co-Chairman Inouye have done to develop a comprehensive communications bill rewrite. I want to thank Senator Dorgan, with whom I have worked closely to carefully craft the Internet Freedom Preservation Act. I also want to thank Senators Inouye and Boxer for co-sponsorship of our legislation.

Senator Dorgan and I introduced the Internet Freedom Preservation Act to preserve net neutrality—the basic idea that all content, applications, and services should be treated equally and fairly on the Internet. Unfortunately, the 2005 FCC decision that deregulated broadband services also lifted nondiscrimination safeguards that had been in place since the Internet's inception. Our legislation brings these protections back in order to ensure that the Era of Digital Democracy, brought about by the proliferation of the Internet, is allowed to continue.

The Internet represents one of the most revolutionary technological innovations the world has ever seen. With over 1 billion users worldwide, the Internet has formed an explosion in consumer choice, the creation of new businesses, and the spread of democratic ideals around the globe. This revolution occurred because the Internet was allowed to develop in an open, unfettered, nondiscriminatory environment.

Now that the Supreme Court and FCC have removed longstanding regulations, cable and phone companies are planning to set up tollbooths along the information superhighway. Soon, innovators with great ideas will have to pay a fee if they want to be sure their website can get through on the fast lane of the web. Innovators with great ideas, but without deep pockets, will be relegated to the Internet's "dirt road." This will fundamentally alter every Internet user's experience and stifle the entrepreneurship that flourishes on the world's last remaining frontier.

Some have argued that net neutrality legislation is a solution in search of a problem, but we know a two-tiered Internet is on the horizon because the executives of these companies themselves have publically announced their intentions to divide the Internet into a fast lane and a slow lane. One company executive announced his plan to turn the Internet into a “pay-for-performance marketplace.” Another has said that content providers want “to use [his] pipes for free. But [he] ain’t going to let them do that.” These comments are a far cry from the democratic spirit under which the Internet was created. A First Amendment for the Internet is needed to continue to allow all expressions on the Internet to be heard with equal weight.

In a competitive marketplace, consumers would not stand for an Internet that doesn’t embrace the same principles upon which this country was founded. But the reality is that 98 percent of high-speed Internet subscribers get their service from either a phone company or a cable company. It is true that new competitive broadband technologies like wireless and broadband-over-powerlines are being developed, but they have not yet taken hold in the marketplace. Most Americans have only one or two providers to choose from. If they don’t like the charges they must pay to ensure that their website can be viewed, they often have no where else to go.

I recognize that some parties are concerned that if net neutrality legislation is not done right, investment in next-generation broadband could be harmed. I am open to input to ensure that does not happen. The truth is that consumers don’t want purchase-broadband to have an empty pipe, they want access to all the compelling websites at the other end of the pipe. The Internet Freedom Preservation Act ensures all Internet websites are treated in a fair manner so that subscribers who pay their monthly access fees can have an Internet worth accessing.

It took Congress ten years to get around to rewriting the Telecommunications Act of 1996. We cannot afford to wait another ten years to save the Internet from becoming a world of haves and have-nots—a situation clearly not in the consumer’s best interest. I look forward to hearing constructive feedback on my legislation from the witnesses here today, and I hope to work with Chairman Stevens and other members of this committee to ensure we get this right, and going forward.

Thank you, Mr. Chairman.

Senator McCAIN. Senator Pryor?

**STATEMENT OF HON. MARK PRYOR,
U.S. SENATOR FROM ARKANSAS**

Senator PRYOR. Thank you, Mr. Chairman. I know that my colleagues are eager to hear from the panel and ask questions, so I’ll withhold my comments on the bill today until my turn for questions.

Thank you.

Senator McCAIN. Thank you, Senator Pryor.

I want to welcome the witnesses today. Mr. Paul Misener is the Vice President of Global Public Policy, Amazon.com; Mr. Tom Tauke, Executive Vice President of Verizon; Mr. Timothy Regan, the Senior Vice President of Corning Incorporated; Mr. Ben Scott, Policy Director of Free Press; Mr. Roger Cochetti, who’s the Group Director of U.S. Public Policy, CompTIA; and Mr. Earl Comstock, President and Chief Executive Officer of COMPTTEL.

We’ll begin with you, Mr. Misener.

**STATEMENT OF PAUL MISENER, VICE PRESIDENT,
GLOBAL PUBLIC POLICY, AMAZON.COM**

Mr. MISENER. Good morning, Chairman McCain, and Ranking Member Inouye and members of the Committee. Thank you very much for inviting me to testify.

Mr. Chairman, Amazon.com belongs to a coalition of companies that includes eBay, Google, IAC, Microsoft, and Yahoo!, that is working closely with the growing assembly of well over 100 consumer groups, associations, and companies that seek to preserve

the open, nondiscriminatory Internet which has been so beneficial to American consumers, innovation, and global competitiveness.

On behalf of our coalition, I want to thank Chairman Stevens and Co-Chairman Inouye for calling today's hearing, and for Chairman McCain to chair it. Our coalition also appreciates the attention the Committee has today to the issue of net neutrality. We are particularly grateful to Senators Snowe and Dorgan for their leadership on this issue, and for introducing S. 2917, the Internet Freedom Preservation Act, which our coalition enthusiastically endorses.

Mr. Chairman, rather than read all of my rather lengthy written statement, I will use my allotted time to describe how net neutrality advocates, including myself, share the philosophy of limited government espoused by opponents of net neutrality. We just don't share their view of the facts.

Indeed, if the salient facts were truly as the opponents portray them, I would be on their side of the debate. But the realities of net neutrality are far different from how the—its opponents discuss it. And here are a few key examples.

Opponents of net neutrality say that policymakers should defer to the competitive free market. I wholeheartedly agree. But the market for residential broadband Internet access is far from competitive now, and won't be competitive anytime soon. The FCC's most recent data, released last month, revealed that 99.5 percent of American residential consumers get their advanced-Internet access from either phone or cable companies. It is a duopoly.

Opponents of net neutrality say that net neutrality would regulate the Internet for the first time. I would share this implicit concern if this were true, but it's not. The Internet has been regulated, and it flourished while it was. Until last summer, nondiscrimination rules regulated most, if not all, American consumers' Internet access.

Opponents of net neutrality say that network operators won't invest in infrastructure if net neutrality rules are adopted. I would be very concerned if this were true, yet the network operators already were investing heavily before nondiscrimination regulations were lifted last summer. Over the most recent period reported by the FCC, which ended before the Commission dropped its nondiscrimination rules, broadband advanced Internet access lines increased by over 60 percent in just 1 year.

Opponents of net neutrality say that broadband network operators should be paid for the services they provide. I agree. But, contrary to the impression left by the network operators, they already get paid for their service by consumers, by content companies, by corporate users of ancillary services, and by other consumers who now, or soon will, purchase video services from them.

Opponents of net neutrality say that net neutrality needs a return to common carriage, which they oppose. I, too, oppose returning broadband access to full common-carrier status, but nondiscrimination is only one component of common carriage, and, in this context, it's the least regulatory way to preserve the openness of the Internet. Moreover, nondiscrimination provisions are frequently employed throughout communications law, including many times elsewhere in the bill before us today.

Telco opponents of net neutrality say that we need to act quickly to bring video competition to American consumers. I agree. But, rather than just promoting one more cable TV service, this one run by the phone company, Congress should also preserve nondiscriminatory consumer access to the myriad independent video sources online, which have the potential to become the ultimate in à la carte programming.

Last, opponents of net neutrality say that policymakers should wait for a problem to arise before acting. I also eschew anticipatory regulation. But net neutrality is not new, but, rather, merely a reinstatement of the status quo. To ignore the FCC's actions last year, the network operators market power in their boldly announced intentions would be to disregard a clear and present danger.

Mr. Chairman, in sum, the disagreement here is not philosophical, it's factual. And I respectfully ask that you and your colleagues recognize that despite how we wish it were otherwise, the market for broadband Internet access is not competitive, and that the network operators fully intend to extend their market power over Internet access to market power over Internet content in a way that was illegal until last summer. I, therefore, urge Congress to reinstate meaningful, enforceable, bright-line safeguards that preserve consumers' longstanding freedom of Internet content choice.

Thank you, again, for inviting me to testify, and I look forward to your questions.

[The prepared statement of Mr. Misener follows:]

PREPARED STATEMENT OF PAUL MISENER, VICE PRESIDENT,
GLOBAL PUBLIC POLICY, AMAZON.COM

Good morning, Chairman Stevens, Co-Chairman Inouye, and members of the Committee. My name is Paul Misener. I am Amazon.com's Vice President for Global Public Policy. Amazon belongs to a coalition that includes eBay, Google, IAC/InterActiveCorp, Microsoft, and Yahoo!, that was formed to express our shared concerns about the topic of this hearing. Thank you very much for inviting me to testify on this important matter. I respectfully request that my entire written statement be included in the record.

I. Introduction

Mr. Chairman, the phone and cable companies will fundamentally alter the Internet in America unless Congress acts to stop them. They have the market power, and regulatory permission to restrict American consumers' access to broadband Internet content, including music and movies, and have announced their plans to do so.

Amazon.com is an Internet-based retailer and retail platform with over fifty million customers worldwide. We believe the open paradigm of the Internet is important for society and innovation. More specifically, we want to ensure that consumers, including our customers, retain their longstanding freedom to access the broadband Internet content of their choice, including that content available from Amazon.com. Currently, consumers pay network operators for Internet access, and have the freedom to select lawful content from providers like Amazon, who pay network operators millions of dollars a year for Internet access.

In essence, we fear circumstances in which broadband network operators with market power are permitted—based on payments, political or religious viewpoints, or any other non-technical discriminatory factors—to prefer some content and thereby restrict consumer access to other content.

As already noted, many large Internet content companies including Amazon.com, eBay, Google, IAC/InterActiveCorp, Intel, Microsoft, and Yahoo! are very concerned about network operators' ability and plans to restrict content choice. A few weeks ago, the chief executive officers of these companies, Jeff Bezos, Meg Whitman, Eric

Schmidt, Barry Diller, Paul Otellini, Steve Ballmer, and Terry Semel, wrote the Chairman and Co-Chairman of this committee to say that:

[t]he open marketplace of the Internet, or what has become known as “network neutrality,” empowers America’s citizenry, fuels our engine of innovation and is central to our global leadership in Internet technology and services. The rules of the road that preserved openness were eliminated last summer by the Federal Communications Commission, and it is critical that Congress moves quickly to reinstate them.

The Internet has succeeded precisely because of these rules, which have prevented network operators from using their control over Internet access to dictate consumers’ Internet experience. Likewise, innovators large and small, as well as investors, have relied on market and regulatory certainty coupled with their own ingenuity to develop new and better online offerings. This “innovation without permission” is, from our perspective, the essence of the Internet.

These seven CEOs then urged the Committee “to enact legislation preventing discrimination against the content and services of those not affiliated with network operators and thereby preserve network neutrality,” and cautioned that:

“[a]bsent such safeguards, the fundamental paradigm of the Internet will be irreparably altered and that most worthy of preservation will be lost. American consumers will lose basic Internet freedoms, the engine of innovation will be hobbled, and our global competitiveness will be compromised.”

Lastly, the CEOs expressed their desire to work for legislation “to re-establish longstanding net neutrality protections.”

Our companies believe that Congress must act to preserve longstanding consumer freedoms. The telco and cable operators must not be allowed to extend their market power over broadband Internet access to market power over broadband Internet content.

This is not just a “big Internet company” issue, however. Ultimately, this is a consumer and much broader industry issue, and we are part of a coalition of well over 100 organizations that have joined together to support legislative safeguards to preserve the openness of the Internet. As of last month, these organizations included the AARP, Acopia Networks, Adaptive Marketing LLC, Adobe, Advancedmultimedia.com, Aegon Direct Marketing Services, Airespring, Amazon.com, American Association of Libraries, AnalogZone, AngleBeds.com, Ask.com, Association of Research Libraries, Awow Communications, Bandwidth.com, Bloglines, Borsetti & Co., BT Americas Inc., Business Software Alliance, CALTEL, Cendant, Chemistry.com, CinemaNow, Circumedia LLC, CitySearch, CommPartners Holding Company, COMPTEL, Comunicano, Inc., Consumer Electronics Association, Consumer Federation of America, Corliant, Cornerstone Brands, Inc., Dagdamor Media, Dave Pettito Direct, DiMA, Domania, Downstream, Dreamslee.com, Dresses.com, EarthLink, eBay, eBrands Commerce Group, Economics & Technology, Inc., Educause, Elaine P. Dine, Electronic Retailing Association, Entertainment Publications, Evite.com, Excite, Expedia, Free Press, Free World Dialup, GetSmart, Gifts.com, Google, GotVoice, Inc., Graceline Canada, Hawthorne Direct, Home Shopping Network, Hotels.com, Hotwire, HSE24, IAC/InterActiveCorp, Iceland Health Inc., iFreedom Communications, iNest, InPulse Response, INS, Interactive Travel Services Association, InterMetro, Internet2, Interval International, Intervox.com, IntraISP, Invens Capital, Isen.com, LLC, IVR Technologies, iWon, J. Arnold & Associates, JohnnyZip, Lafayette Group, Inc., Law Offices of James Tobin, LendingTree, Lingo, Inc., Listyourself.net, Livemercial, Match.com, McFadden Associates, MCM Telecom, Media Access Project, Media Partners Worldwide, Mercury Media, Merrick Group, Microcom, Microsoft, Miller & Van Eaton, National Retail Federation, Nationalblinds.com, NetCoalition, Objectworld, Pac-West, PointOne, PRC, Primus Telecommunications, Product Partners LLC, Public Knowledge, Pulver.com, RealEstate.com, ReserveAmerica, Riffone.com, S&B Technical Products, Savatar, Savvier, ServiceMagic, Shelcomm, Shoebuy.com, Skype, Sling Media, Sling Media Inc., SOHolutions, Sonus Capital Management, Sony Electronics Inc., SunRocket, Symercy Financial Corp., Techviser, Telekom Austria, Telephia, TELLO, Ticketmaster, Tier1Research, TiVO, TNS, Tonystickets.com, Tranquilitymatress.com, Travelocity, udate.com, VI Technologies, Vivox, WCW Networks, and Yahoo!.

I hope that all of these entities’ views and, most importantly to Amazon.com, the interests of our customers, will be thoroughly considered.

Moreover, this is not merely a dispute between American network operators on one hand, and American consumers and content providers on the other. Rather, it is the first and precedent-setting battle in a worldwide conflict. Recent news reports

confirm that foreign network operators such as Deutsche Telekom and Telecom Italia also are interested in extending their market power over their networks to market power over content. Thus, if U.S. policymakers were to allow American network operators to extract oligopoly rents from American content providers, our policymakers would be simultaneously setting a precedent for allowing foreign operators to exercise the same leverage over world-leading American Internet content companies and their customers.

In my time this morning, I will describe the market power of network operators and the details of how they intend to extend that market power to limit consumer choice of content, such as movies, television, and music. I then will describe the need for Congress to require adoption of regulations to confront this clear and present danger; how failure to act will set a dangerous international precedent that will harm American competitiveness overseas; and how legislation that would grant national video-franchising relief should not be enacted without such provisions. Lastly, I will propose modest safeguards to preserve Americans' longstanding freedom of Internet content choice.

II. Network Operators Have Market Power: Consumers Have Little or No Choice of Broadband Internet Access

Mr. Chairman, as much as we wish it were otherwise, consumers have little or no real choice of broadband Internet access. For the foreseeable future, nearly all Americans will have two or fewer providers available: the phone company, the cable company, or both. And, unfortunately, consumers will continue to face discouragingly high costs of switching between them; equipment swaps, inside wiring changes, technician visits, long-term contracts, and the bundling of multiple services all contribute to these costs.

Despite the common misconception intentionally perpetuated by the network operators, the Internet did *not* grow up in an unregulated environment; its growth and success were due in large measure to the longstanding rules that governed its infrastructure until last year's FCC decision. Although many of the rules were outdated and worthy of deregulation, the Commission erred by completely abandoning non-discrimination requirements before the market became competitive.

The Commission's own semi-annually reported data on the competitive availability of broadband access are fundamentally misleading. These data, which purport to show multiple broadband service providers in many areas of the country, completely obscure the realities faced by individual consumers. Unfortunately, however, these data also were the basis for the Commission's recent actions.

In the first place, the data count as high-speed broadband any services that deliver as little as 200 kbps in one direction. Although this may have been a reasonable definition of broadband a decade ago, it is preposterously slow today, incapable of delivering even typical TV quality video, let alone HDTV, and is but one five-hundredth the speed being provided to millions of consumers in Korea and elsewhere. Second, the geographic areas analyzed are zip codes, not individual neighborhoods or households. So while there may be three or four true broadband network operators (for example, two telcos and two cable companies) serving small separate areas in a zip code, no one consumer may have access to more than two of them (one telco and one cable company).

The result of these misleading FCC data is that the amount of broadband consumer choice is wildly overstated, particularly when the aforementioned high switching costs are considered. If it really were easy for Americans to switch among five, six, or more true broadband Internet access providers, the market would be competitive and legislated consumer safeguards would not be necessary.

Unfortunately, what exists for the vast majority of Americans is, at best, a duopoly of the local phone and cable companies. Widespread deployment of alternative broadband technologies capable of high-quality video remains a distant hope and, with yet another mega-merger in the works (this time AT&T and BellSouth), the promise of inter-regional local phone company competition is all but dead. In such oligopolistic conditions, consumers are left with fewer services, higher prices, or both.

The FCC's most recent semi-annual broadband deployment data, released last month, verify this bleak assessment. Perhaps the most salient fact revealed in the data is that, of the 34.3 million advanced-services broadband lines serving primarily residential end users, *only one half of one percent* use other than telco or cable technology. Given that telco-telco and cable-cable overbuilds are so very rare, this fact confirms that nearly all American consumers are stuck with the telco-cable duopoly.

To be clear, we don't begrudge the phone and cable companies their current market power over broadband Internet access networks. Despite the longstanding de-

sires and noble aspirations of policymakers, America is stuck with this super-concentrated market for the foreseeable future.

Moreover, although we oppose the collection of oligopoly rents, we certainly don't seek to deny network operators a healthy return on their investments. But there are two obvious considerations: what are their investments and are they getting a return? While it is true that there are new investments being made (well before any discriminatory pricing regime has been established), even the operators like to remind regulators that they are, in Verizon's words, potential video service providers "who already have access to the rights-of-way" around the country. But, of course, they did not obtain these incredibly valuable rights-of-way on the competitive market but, rather, by government grant to a monopoly service provider. In sum, much of their "investment" was either given to them, or explicitly protected from competition by the government.

Just as importantly, content providers currently pay network operators for the amount of connection capacity they use, and network operators can charge consumers different prices depending upon how much bandwidth they use. This sort of connectivity "tiering" makes perfect sense. And, of course, network operators will charge consumers for the provision of any ancillary services, such as affiliated video content.

Perhaps the best way to gauge whether they believe their investments without discrimination are providing an acceptable return is to note that the FCC data indicate that telco and cable broadband services are being deployed and taken by consumers at a rapid pace. Given the network operators' claims (which I believe) that they are not *currently* engaged in much, if any, content discrimination, this is a clear indication that network operators need not discriminate to deploy broadband in America.

We also welcome broadband network operators' innovations within the network. With Moore's Law at work, network operators ought to be able to deploy innovative new technologies and services that, with increasing efficiency, provide benefits to operators and users alike. And we certainly don't oppose network operators' entry into competing businesses so long as they are not allowed to leverage their market power over broadband Internet access to favor these ancillary endeavors.

What we seek is more modest, yet far more important: We ask that Congress keep the telco and cable operators from taking their market power over broadband Internet access and extending it to market power over broadband Internet content.

III. Unless Congress Acts Soon, Network Operators Will Use Their Market Power Over Access To Restrict Consumer Choice of Broadband Internet Content

Mr. Chairman, unless Congress acts soon, American consumers will receive artificially restricted choice of broadband Internet content. Leveraging their market power, phone and cable companies plan to restrict American consumers' access to such content based in large part on lucrative deals they intend to cut with third parties. And it will be just as easy for the operators to favor content based on political or religious viewpoints, or other non-technical discriminatory criteria. By constraining consumer access to content providers, the network operators also would create an artificial "channel scarcity"—essentially a bandwidth cartel—where none previously existed.

After years of administrative proceedings and litigation, last year the FCC reclassified broadband Internet access by wireline service providers, both telco and cable. Although the Commission simultaneously adopted a policy statement that confirms the Agency's statutory authority and possible intentions to act, the statement fails to address some likely discriminatory behaviors and, in any case, is explicitly unenforceable. So, with the exception of weak merger conditions that apply the FCC's equally weak policy statement to a few network operators, and expire for no apparent reason in 18 months (the market certainly won't be competitive by then), telcos and cable companies may restrict consumer access to content at will. Because American consumers' access to Internet content is in jeopardy, Congress needs to act.

Just as it is clear that the network operators have the market power to restrict consumers' choice of broadband Internet content, it has become equally clear that they fully intend to do so. Not only have the telcos and cable companies stridently and steadfastly opposed any meaningful network neutrality rules, their most senior executives have, over the past eight months (noticeably, beginning only after the FCC's final reclassification actions), issued scary, yet refreshingly honest statements that reveal their plans for restricting consumer access to content. Simply put, the network operators are planning to restrict consumer choice of broadband Internet content based on deals they intend to strike with content providers and, perhaps, editorial viewpoints or other non-technical discriminatory criteria. This is precisely

the opposite of “à la carte” pricing being sought from current, vertically integrated video service providers. Indeed, rather than enhancing consumer choice and flexibility, the network operators are moving retrograde to constrain such choice and flexibility, and create an artificial scarcity of content outlets.

Although the network operators have been somewhat less clear on exactly *how* they intend to limit consumer access, their FCC filings and public statements reveal that they plan to do so in three key ways. But before I describe these, please allow me to summarize their technology plans. There are many differences among the technologies the duopoly network operators intend to use (hybrid fiber-coax by the cable operators and either fiber-to-the-home or fiber-to-the-node plus DSL over copper twisted pair by the telco operators), but all three technologies have been designed to operate the same way in practice, with two downstream components: a very high capacity (“fast lane”) cable-like private network component, and a much lower capacity (“slow lane”) downstream broadband Internet access component. The fast lane will be operated as a closed network, while the slow lane will be more (but not entirely) open.

A. Specific Network Operator Plans

The network operators apparently plan to restrict consumer choice of broadband Internet content in three essential ways: by providing (1) a closed fast lane and an open slow lane; (2) paid “police escort” *within* the slow lane; and (3) preferential “local on-ramps” *into* the slow lane.

1. Closed Fast Lane and Open Slow Lane

First, as noted before, each network operator has or is constructing a fast lane for their affiliated broadband content provided by a sister company, and a slow lane for broadband Internet content provided by others. The fast lane they reserve for themselves is a closed, private network. This has always been the case for cable operators and, even for the telco operators deploying broadband, make no mistake: the overall broadband pipes they’re deploying are mostly just another version of cable TV, not broadband Internet. Consumers should recognize that despite the nearly ubiquitous and puffy advertising, it’s not about “your world, delivered,” it’s mostly about *their* world.

2. Paid Police Escort Within the Slow Lane

Second, the network operators intend to offer Internet content providers paid prioritization (essentially a paid “police escort”) in the slow lane. Their plan is that, as content enters the operators’ slow lanes from an Internet or other network access point, the speed with which this content transits their network will be determined, in part, based on whether the content owner paid for prioritization. The terms-of-art the network operators use to describe this prioritization include “quality of service” and “tiering.” Each term is intentionally confusing. I am not suggesting that certain types of services be denied prioritization, just like certain kinds of road traffic, like emergency services, deserve police escort. But such police escort should not be made available for a fee; otherwise those unable to pay the fee will always be stuck in traffic. Put another way, to prioritize some traffic is to degrade other traffic. It’s a zero-sum game at any bottleneck. This fact is intentionally obscured by network operators, who incorrectly claim that they will not degrade anyone’s content. Neutral prioritization (for example, network management whereby all live video streams receive priority above all text files) would be perfectly acceptable. But for an operator to sell priority to the highest bidder, the degradation of service to content providers who can’t or don’t pay would be anticompetitive. Fortunately, it also is predictable and, with modest legal safeguards, avoidable.

As should be obvious, small businesses will have a very hard time innovating if they need to pay for “police escort” prioritization to compete. When some companies like mine have noted this previously, some of the network operators respond with something to the effect of “beware when big companies are looking out for the interests of little ones.” That response seeks to change the subject and obscure three key points. First, it doesn’t change the underlying fact that small entrepreneurs—facing a possible bidding war among big companies—are going to be hurt unless Congress does something now. Second, many of the big companies noting this imminent throttle on small company innovation were, indeed, innovative small companies only just a few years ago. And, third, on behalf of our customers, we want to ensure that our innovations—essentially new businesses operating in start-up mode by our employees—are not hindered in the same way. We merely want, as Internet pioneer Vint Cerf so clearly puts it, “to innovate without permission” of the network operators.

3. Preferential Local On-Ramps Into the Slow Lane

Lastly, the network operators intend to offer downstream content injection (essentially “local on-ramps” to the broadband slow lane) to content providers who are willing to pay. This would enable content to be delivered from geographic locations closer to consumers and provide better user experiences. Such local on-ramps already are provided in a competitive access market by companies such as Akamai, which has servers distributed throughout the United States so that content can be delivered quickly to consumers, rather than having to traverse great distances on the Internet. Although content providers have no expectation that such local on-ramps must be provided for free, network operators must not offer local on-ramps on discriminatory terms.

B. Network Operator Claims

So how do the network operators discuss these plans? They obfuscate. For example, most network operators say they won’t, quote, “block” websites. This relatively new concession is neither noble nor comforting and, in fact, is quite misleading. While they may not actually block access to a particular website, they easily could make that site’s content unusable, either by overly constraining capacity (making the slow lane too slow); by providing prioritization only to those willing and able to pay (the paid “police escorts” that make everyone else wait); or by providing downstream injection (the local on-ramps) only on unreasonable or discriminatory terms. So it’s a matter of semantics: they may never block content, but still could make it unusable.

Wireless network operators and their representatives are seeking exemption from any nondiscrimination requirement enacted, but it is difficult to see on what basis such an exemption would be justified. Technology neutrality dictates equal treatment of copper, glass, and the ether. Consumers need not, and should not, have their access via such various means treated differently by regulation, unless there is some difference among them that legitimizes disparate treatment. The possible differences for wireless are bandwidth, mobility, “closed network,” and competition.

If the concern is bandwidth or mobility, wireless providers can rest assured that a nondiscrimination requirement would neither require certain levels of bandwidth or performance but, rather, that all sources of technically-similar Internet content be treated equally. And if a wireless carrier wants to offer a purely private network, without Internet access, then nondiscrimination rules would not apply.

It is important to recognize that, as competitive as the mobile wireless market may appear on the surface, it would not exist on this issue because the competing wireless providers are almost all owned by the uncompetitive telcos who oppose nondiscrimination rules. Although Sprint/NexTel is independent, T-Mobile is owned by Deutsche Telekom (which has announced its intention to discriminate), Cingular is owned by AT&T and BellSouth, and Verizon Wireless is owned by Verizon. On the issue of Internet content nondiscrimination, therefore, policymakers cannot expect the wireless market to behave competitively.

Other network operators say, dismissively, that this is a “solution in search of a problem,” or that policymakers should wait for a problem to arise before acting. This wait-and-see approach was endorsed by the FCC last year. But what further proof is needed? The time to act is now. To ignore the network operators’ market power, their strident and steadfast opposition to meaningful safeguards, their boldly announced intentions, and their increasingly clear specific plans, is truly to turn a blind eye to a clear and present danger to consumers.

This situation is eerily similar to that facing Congress a few years ago with respect to Internet access taxes. Congress correctly foresaw the future problem of state and local governments imposing burdensome taxes on Internet access and moved peremptorily to ban such taxes by enacting then extending the Internet Tax Freedom Act. Today, the functional equivalents of the state and local tax collectors are the oligopolistic telco and cable network operators, and Congress should likewise recognize and peremptorily thwart the threat they pose to the Internet.

IV. Failure To Protect American Consumers Also Will Enable Foreign Network Operators’ Announced Plans To Restrict American Content Companies’ Access to Overseas Markets

To make matters worse, foreign broadband Internet access network operators have plans to restrict world-leading American content companies’ access to overseas consumers. Deutsche Telekom and Telecom Italia have already announced their plans. Earlier this year, for example, Kai-Uwe Ricke, the CEO of Deutsche Telekom said that “the Googles, Yahoos, eBays and Amazons” “need infrastructure”; that “[i]t cannot be that infrastructure providers like [Deutsche] Telekom continue to invest, while others profit from it”; and that “Web companies that use infrastructures [sic]

for their business should also do their part.” But, of course, Amazon.com and others already do their part by paying for Internet connections. What Mr. Ricke actually wants, of course, is exactly what our domestic network operators want: to use market power to charge consumers once and American content providers twice, all for the same thing.

American policymakers must consider the effects of our domestic regulatory actions on our global competitiveness. American content companies like Amazon.com are world leaders today, in part because our access to consumers in other markets has not been impeded. If foreign network operators, almost all of which face no competition, and are fully or partly owned by foreign governments, with obvious incentives to favor non-American content companies, are allowed to extract discriminatory rents from American content companies, our competitiveness both as an industry and a Nation will suffer. Put another way, even if it were sound policy for Congress to allow American network operators to extract oligopoly rents from American content companies, it could not be sound policy to set the precedent for foreign network operators to extort payments from world-leading American content companies. How could our trade representatives challenge such actions abroad if we permit them here at home? Clearly, we must not lay the groundwork for every network operator around the globe to extort payments from American Internet companies. The only way we can hope to prevent this outcome is to hold the line domestically: we must not allow consumer choice of content to be artificially restricted by network operators with market power.

V. If Congress Fails To Act, the Most Likely Result Will Be To Leave American Consumers With Dramatically Reduced Content Choice; To Stall American Online Innovation; and To Wound U.S. Global Internet Competitiveness

Mr. Chairman, if Congress fails to reinstate essential consumer safeguards recently abandoned by the FCC, the most likely result would be to leave American consumers with dramatically reduced content choice; to stall American online innovation; and to wound U.S. global Internet competitiveness. Here’s the likely way that unfortunate result would be reached:

- For the next five to ten years, phone and cable companies will maintain their duopoly market power over consumer broadband Internet access.
- The phone and cable companies also will continue to invest and deploy broadband, as they have for many years under nondiscrimination rules, and they will continue to realize returns on their investments by being handsomely paid for access by consumers and content providers alike.
- Although the network operators will continue to promise that they won’t, “block” access to websites, they will firm up their plans to degrade access to some websites as a consequence of giving priority, “fast lane” access to others.
- The telcos also will start providing proprietary video service, and will continue to seek accelerated franchise grants without build-out requirements, based in part on the existence of Internet video competition which, simultaneously, they are moving to quash.
- At some point, the phone and cable companies will present a simple ultimatum to major Internet content providers: pay us for prioritization or, if you don’t pay, your content will be degraded relative to those who do pay.
- Similar deals may be struck based on political or religious viewpoints, or other non-technical discriminatory factors.
- In this way, the network operators will extend their market power over access to market power over content. They will use their monopolies to monopolize.
- A bidding war will quickly ensue. The top-tier Internet content companies will bid up the price of prioritization on each of the half dozen or so major Internet access networks.
- Smaller companies will recognize that they have no hope of competing in this bidding war, and independent venture capital for new online businesses will dry up. The new way for an entrepreneur to take a business online will be to seek permission from the phone and cable companies.
- A flurry of antitrust actions will then be filed against the network operators, but even if the courts don’t find that the plaintiffs fail to state a claim, these actions will take far too long to be effective.
- Meanwhile, the foreign network operators, such as Deutsche Telekom, almost all of which are wholly or partially owned by a foreign government, will follow through on their already-announced plans to use discrimination as a great way

to make more money off the world-leading American Internet content companies. In effect, foreign network operators will restrict access of American Internet companies to foreign markets.

- Congress or the FCC will soon thereafter realize that it was a mistake to allow the network operators to control Internet content, and will rush to pass remedial legislation.
- Unfortunately, it will be too late, because the lost years of innovation will be forever lost: the network operators will have wastefully invested in equipment designed for discrimination instead of speed; and the foreign governments certainly won't reverse themselves just because America reconsidered.
- So, the result of Congress's unwillingness to address this clear and present danger will be to leave American consumers with dramatically reduced content choice; to stall American online innovation; and to wound U.S. global Internet competitiveness.

Mr. Chairman, this sorry tale is eminently avoidable. I urge you and your colleagues to recognize that, despite how we wish it were otherwise, the market for broadband Internet access is not competitive, and that the network operators—both domestic and foreign—fully intend to extend their market power over access to market power over content. I, therefore, urge that Congress act now to reinstate meaningful, enforceable, bright-line safeguards that preserve consumers' longstanding freedom of Internet content choice.

VI. Any Legislation Granting Video Franchising Relief Must Also Affirmatively Preserve Consumer Freedom of Choice Of Internet Content

Mr. Chairman, the preservation of American consumers' longstanding freedom of choice of Internet content should be addressed in the context of national video franchising relief. The reason for granting such relief is, of course, the introduction of additional video competition for consumers, so it would be counterproductive to facilitate the delivery of content of one additional competitor (the phone company), while limiting the availability of thousands of other competitors via the Internet.

Moreover, in support of their opposition to requirements for system build-out and service to rural areas, the telcos recently have repeatedly cited the competition from Internet content providers ("Internet-streaming video" and "Internet-downloaded video," in AT&T's words). As Verizon reported to the Commission in opposition to video build-out requirements, there is "significant competition in access to video programming through myriad means, including Internet and satellite sources. . . ." BellSouth went so far as to tell the FCC that Internet content competition would diminish unless telcos were given video franchising relief: "[i]f LFAs [local franchising authorities] are permitted to delay or prevent broadband providers from also [in addition to cable] offering video service, then competition will be greatly (and probably permanently) impeded. This is particularly true given the plethora of new [Internet-based] video offerings that require robust broadband networks."

So the network operators have the temerity to cite the presence of competitive Internet-based video programming as justification for preempting local government rules, and dodging reasonable build-out obligations, all while planning to quash that competition by restricting consumer access to Internet content.

In the interests of competition and consumer choice, therefore, video franchising relief must not be granted without meaningful broadband Internet content safeguards; otherwise, consumers will receive *less*, not more, choice of content.

These safeguards must keep the network operators from cutting "paid police escort" deals that would adversely affect the traffic of other content providers who can't or don't pay. And they also should keep the operators from insisting upon unreasonable or discriminatory terms for leasing "local on-ramps." In short, the most likely and dangerous anti-consumer discriminatory behaviors of broadband network operators must be thwarted in advance by legislation and regulation.

Mr. Chairman, we appreciate that S. 2686 includes a title on "Internet Neutrality." Unfortunately, its provisions do not confront the clear and present danger facing the Internet as a platform for consumer choice. Rather, this title would direct the FCC to study the issue and report annually to Congress, while limiting the Commission's ability to recommend how to address any problems the agency finds. As the FCC recognized in its final broadband reclassification order last August, the Agency has the authority to act in this area. So I respectfully submit that Congress either needs to direct the Commission to act under its current authority, or to enact other meaningful safeguards for protecting American consumers and competition.

VII. Congress Should Reinstate Longstanding Regulatory Safeguards To Preserve Consumer Freedom of Choice of Internet Content

Mr. Chairman, we respectfully ask that Congress enact modest but effective safeguards to reinstate limited protections that the FCC recently abandoned, and thereby preserve American consumers' longstanding freedom of choice of Internet content. Without much effort, these regulatory safeguards can be narrowly drawn so that operators' private networks are not invaded, and so that operators are appropriately compensated for the services they provide.

Two essential consumer safeguards we seek can be summarized as follows:

1. Content transiting an operator's broadband Internet access network may be prioritized only on the basis of the type of content and the level of bandwidth purchased by the consumer, not ownership, source, or affiliation of the content. (That is, for traffic within the broadband network's Internet access lane, "police escort" may be provided only based on the technical nature of the traffic, or whether the consumer has paid more for a somewhat higher speed limit.)
2. The terms for local content injection must be reasonable and non-discriminatory; network operators must not be allowed to give preferential deals to affiliated or certain other content providers. (That is, "local on-ramps" into the Internet access lane need not be free, but the road owner must not charge unreasonable or discriminatory rates to favor their own or only some others' traffic.)

Note that we are not seeking to have broadband Internet access reclassified as common carriage. To the contrary, we think that with modest safeguards, appropriately drafted and clarified, and with mandatory and meaningful agency enforcement, American consumers could be confident that their longstanding choice of lawful Internet content will not be limited by network operators.

VIII. Conclusion

In conclusion, Mr. Chairman, the phone and cable companies will fundamentally alter the Internet in America unless Congress acts to stop them. They have the market power, technical means, and regulatory permission to restrict American consumers' access to broadband Internet content, and they've announced plans to do so.

For the foreseeable future, American consumers will have little or no real choice of broadband Internet *access*. And—unless Congress acts soon to reinstate modest, and longstanding consumer safeguards—consumer freedom to choose broadband Internet *content* will be artificially limited. I urge you and your colleagues to recognize that, despite how we wish it were otherwise, the market for broadband Internet access is not competitive, and that the network operators—both domestic and foreign—fully intend to extend their market power to restrict consumer choice of content by discriminatorily constraining consumer access to American content companies. I also urge that, simultaneous to any grant of video franchising relief, Congress enact safeguards to preserve American consumers' longstanding freedom of Internet content choice.

Thank you. I look forward to your questions.

Senator INOUE [presiding]. Well, thank you very much, Mr. Misener.

Mr. Tauke?

STATEMENT OF HON. TOM TAUKE, EXECUTIVE VICE PRESIDENT, VERIZON

Mr. TAUKE. Senator Inouye and members of the Committee, thank you very much for the opportunity to testify.

Let me set aside my written statement to offer some observations about what has changed in the world, and why the proposals for net neutrality may not make sense in today's world.

I think it is fair to say that this is the third round of this debate. We had the first round of this debate in 1999. At that time, when it came to broadband access, the cable industry had the biggest portion of the market, and the issue was open access. Should they have to take any ISP that wanted to ride on their network? Cable companies, at that time, owned ISPs, like RoadRunner, for exam-

ple, and they were only offering one ISP service to many of their customers. Other ISPs, like AOL and EarthLink, weren't able to get on.

At that time, we supported open access. We had over 400 ISPs riding on our network, but we said the cable—or the cable approach cannot survive in the marketplace. Their customers will insist that they open up.

Bill Kennard was then Chairman of the FCC. With the backing of the Clinton administration, they said, "We aren't going to regulate access to the Internet. We think that's moving in the wrong direction." They didn't. The market worked. Cable was forced to open up. They've abandoned their own ISPs. They opened up to all of the ISPs.

The second round of debate came when there was an attempt to move the—to define where broadband was regulated. Was it going to be regulated under Title II as a telecom service, or under Title VI as a cable service, or under Title I as an information service?

When the high-tech broadband coalition came together, when the FCC was considering that issue, and they said, "Look, we don't want regulation of the Internet, or Internet access. Instead, we put forward these connectivity principles, which is sort of a standard of good conduct for the industry." And, indeed, the companies who were playing in the industry signed up for that standard of good conduct. Again, the FCC, this time under different leadership, Chairman Powell and Chairman Martin, decided not to regulate the Internet, or Internet access, but, instead, moved Internet—broadband Internet access under Title II—or Title I. They differentiated between the old network, copper wires, and the new network, broadband wires.

Today, we have much the same debate occurring again. But today we have more competition. We have 1,100 ISPs who are using networks. We have 50 VoIP providers. We have two dozen Internet backbones, and we have 80 million websites. And consumers are using all of these things. There are no barriers to them. But there is a fear. There is a fear that, as we move into this new world of new networks, that somehow something bad is going to happen.

Let me explain the fiber network which we are deploying today, and which, obviously, we are the forerunner in the industry on this. But that fiber network is virtually unlimited capacity, 100 megabits of capacity to the home now, and it will expand almost unlimitedly beyond that. On that network, we have three different paths. We call them lasers. One laser carries the video path. So, we'll have a video service.

A second laser carries Internet access. And what we do on video, or any other laser does not effect the Internet access service. So, if a consumer buys 30 megabits of Internet access service from us, or 15 megabits of Internet access service, whatever else we have on the network is not affected by that access service.

The third laser would carry what we call virtual-private networks. Virtual private networks are something that companies have done for business customers for two decades. Essentially, a business may decide it doesn't want to put its services over the Internet, where there is no carrier who has end-to-end responsi-

bility; instead, they want a carrier to build a network and provide a service where a carrier has end-to-end accountability, and, therefore, is—must be accountable for service, quality, security, privacy, and so on.

As we look to the new world, there will be virtual private networks that hook up with consumers. For example, if you want to do medical monitoring of a patient, you don't want that to go over the Internet. You probably—a medical center will want a virtual private network with a carrier who will have end-to-end accountability for delivering that service, ensuring that it's secure, ensuring that there are no glitches in the healthcare monitoring. We couldn't do that kind of thing with the net neutrality proposals that have been put forward.

Bottom line is this: The consumers are in charge today in the Internet space. We have new networks with new capabilities, and the consumers will be in charge tomorrow in that space. We oppose any blocking or degrading of any access to the Internet. We think that's totally unacceptable. But we should be able to offer new services that don't affect Internet access over that same fiber connection.

Thank you very much.

[The prepared statement of Mr. Tauke follows:]

PREPARED STATEMENT OF HON. TOM TAUKE, EXECUTIVE VICE PRESIDENT, VERIZON

Thank you for the invitation to testify today. We appreciate the opportunity to discuss how to spur broadband deployment, promote competition, and provide new services and lower prices to consumers.

The Communications, Consumer's Choice and Broadband Act of 2006 is an important step in creating a comprehensive framework for the communications industry of tomorrow. We believe that this market-focused approach to telecom reform will result in direct, tangible benefits to customers. I'll be happy to share Verizon's views on any of the provisions of the Act, but I'll focus my testimony on two specific areas: video franchising and net neutrality.

Verizon is the single largest investor in broadband technology in America. In addition to providing high-speed DSL and wireless broadband, we are investing in an advanced fiber network that will pass 6 million homes by the end of this year, with a reach of as many as 20 million customers by 2010.

While our network is upgraded, Verizon's commitment to giving customers full access to any lawful content on the Internet is unchanged. We remain committed to providing full Internet access to our customers today and in the future.

What *has* changed is the capacity of our network. Our fiber-to-the-home network, called FiOS, is delivering the fastest Internet access in the marketplace. Today, for example, FiOS customers access the Internet at speeds of 10, 20 and 30 megabits per second upstream, and up to 5 megabits downstream on a network capable of delivering speeds of 100 megabits and beyond.

FiOS is unlike anything being deployed today, and we all have trouble envisioning just what fiber to the home means in terms of speed and capacity. Simply put, FiOS is not your grandfather's Oldsmobile. It's not even today's Lamborghini. It's an entirely different mode of transportation operating at never before seen speeds. And the network itself is not like yesteryear's Route 66, or today's New Jersey Turnpike. It's 10 decks, each with 100 lanes, with the capability to easily add more lanes as necessary.

With consumer demand for more capacity, speed and services online, fiber networks are where the broadband world is going—giving consumers much more. This empowering technology will enable the widespread availability of such innovations as home healthcare monitoring and diagnosis, online education, telecommuting, and communications services for the disabled.

More immediately, FiOS gives us the ability to deliver a tangible and long-awaited benefit to consumers: a superior video service to compete with cable. For consumers this is important, because the lack of widespread video competition is costing them money. A recent study by the Phoenix Center determined that *every year*

franchise reform is delayed takes more than \$8 billion out of consumers' pocket-books.

Last September Verizon began offering its video service in several communities where we gained franchise authority. Beyond getting a great product, consumers are saving money . . . even if they stick with their cable company. That's because, where FiOS TV competes with cable, consumers' cable bills go down, sometimes as much as 40 percent, according to an analysis by the Banc of America.

Verizon wants to bring video competition to as many consumers as we can, and we are investing many billions of dollars to deploy the broadband network to do so.

But today's local franchise process represents a big impediment to our rapid entry in the video marketplace. The required negotiations with localities are time-consuming, sometimes taking as much as 24 months to complete, and they interject an element of uncertainty that casts a long shadow over our capital investment plans.

A streamlined, national franchise process is a fast and fair route to bringing much-needed choice and competition to the video market. Citizens and their communities will see tangible benefits in the form of new services, competitive prices, new jobs, and greater entrepreneurial innovation and high-tech business expansion.

These benefits should not be delayed while we define and debate other issues. This is why we applaud the sensible approach you have taken in this legislation on the subject of net neutrality. Common sense is needed, because, simply put, net neutrality legislation endangers both the future of video choice, and the accelerated broadband investment that is just beginning to gain traction. In our view, the proposals put forward by the more extreme and aggressive proponents of net neutrality really come down to one thing: government regulation of the Internet.

This call for government intervention into the Internet world represents a sharp departure from the free-market policies that have permitted the Internet to develop as it has. This proposed U-turn on Internet policy is based on hypothetical and imagined Internet ills, as opposed to *actual* harm to *actual* consumers.

Such attempts to anticipate potential problems in the market and establish rules to prevent them create bad regulations that usually are in conflict with the orderly development of the market. The broadband marketplace is changing rapidly. It is providing great benefits to consumers. The consumers are in charge in an ever-more competitive marketplace. Now is not the time to fear the consumer-driven innovation and change that is occurring. Now is not the time to adopt new regulations that will throw sand into the gears of the fast-growing and changing broadband marketplace.

Today we are experiencing the world we hoped for just a few years ago. Networks with huge capacity are being deployed; a plethora of new services are now available to consumers. Right now doctors in one city are examining patients in another, using diagnostic tools over broadband networks. Securities firms are constantly upgrading and offering their clients new investment tools to manage their portfolios safely and with speed. Today, it seems everyone is offering streaming or downloadable videos—YouTube, Disney, CBS, Google, the neighborhood kid with a video blog.

If enacted, net neutrality regulation will potentially prohibit us from offering customers the unique and secure platform required for these next-generation services. It will potentially prohibit us from offering a competing video service to consumers. Put another way, radical net neutrality proposals would chill the investment climate for broadband networks, deter and delay broadband rollout, and lock in today's Internet architecture and levels of performance. That isn't good for consumers, and it isn't good for the Nation.

Last year the FCC adopted a policy statement with four principles designed to ensure that broadband networks are widely deployed, and that consumers are able to access the content of their choice. The Commission noted that it was not adopting anticipatory rules, but rather would incorporate these guiding principles into its policymaking activities. The FCC appropriately recognized that in such a dynamic market, it would be premature to impose specific rules in the absence of any problem.

The Communications, Consumer's Choice and Broadband Act of 2006 instructs the FCC to provide meaningful information to Congress and consumers concerning the need, if any, for imposing regulation on the Internet. This approach will allow policymakers to address any market failures, if they were to occur, but without the adoption of broad, anticipatory regulations that would curb innovation and broadband deployment.

We need to refocus our sights not on hypothetical problems, but on real consumer benefits. Consumers have made it clear that they want more choices in video services, more broadband, and more innovation. By removing the impediments to video choice—and not introducing new roadblocks in the guise of Net Neutrality—this leg-

isolation will go a long way toward bringing the tangible benefits of next-generation broadband to all Americans.

Thank you.

Senator INOUE. Thank you very much.
Mr. Regan?

**STATEMENT OF TIMOTHY J. REGAN, SENIOR VICE PRESIDENT,
GLOBAL GOVERNMENT AFFAIRS, CORNING INCORPORATED;
ON BEHALF OF TELECOMMUNICATIONS INDUSTRY
ASSOCIATION**

Mr. REGAN. Thank you, Mr. Chairman.
Am I on now? OK, thank you.

I'm here today representing Corning Incorporated and the Telecommunications Industry Association. We are the guys that develop the technology. We invest in the R&D to make these network works—these networks work. It's not only the edge guys that do innovation; it's us, as well. We are in a world of essentially a circle, innovation circle, where we invent technology, we sell it to the carriers, they put it into a system, and then the applications providers, which Paul talked about, ride on that system to give it value. All three of us contribute. All three of us innovate. But all you hear in this debate is about the things that the guys on the ends do. Well, the guys in the equipment industry do an awful lot, too, invest a lot of money.

Now, Corning is the inventor of optical fiber. We've invested hundreds and hundreds of millions of dollars to prove to the world that you can pass literally an unlimited amount of information over a piece of fiber as thin as your hair. That was an amazing feat. And, fortunately, because of the things that the FCC has done, the deregulation and the pro-competitive policies that they have pursued, with support from many of you on the Committee, the response has been incredible. They have moved from common-carrier regulation. They have moved to a different mode of regulation, which has had an incredible impact.

In the case of fiber optics, for example, before the FCC did what it did, the fiber to the home, as a technology, which as a phenomenal technology, languished. It was going nowhere. There were 180,000 homes in this country that were passed by optical fiber. After the FCC's decision, the number increased by a factor of five. Today, there are 4.1 million homes passed by optical fiber. That's a 2,000 percent—2,000 percent—increase above what it was before the FCC acted. So, there has been a response. And it's been a good response.

We all talk about being 16th in the world in deployment of broadband. We've got to do something about it. A lot of you have said we've got to do something about it. We're starting to do something about it.

The concern we have about these—this Internet, or this net neutrality issue—and we're not unsympathetic to Paul and the concerns that his people have—we, in fact, were the ones that came up with the connectivity principles that protect consumers today. We developed it in the high-tech broadband coalition. We brought it to the FCC before they did the TRO. We said, "You've got to be concerned about consumers here. Nobody can be blocked. Con-

sumers ought to be able to get what they pay for on the Internet. They ought to be able to run the applications they want to run. They ought to be able to connect equipment onto the network that they want to connect.” And that’s exactly what the FCC has done. And the FCC has said, “We have all the power, under Title I, to make sure that this thing operates in a neutral way.”

So, now we move forward, and we say, “Well, should we do something else?” And, again, we’re not unsympathetic to Paul. We’re very sympathetic, but we’re concerned. We’re trying to solve a problem that’s not well defined. And if we go too far, if we introduce too much regulation, you’re going to kill the golden goose, because this thing is very tenuous. Tom’s company takes a beating on Wall Street for investing in optical fiber. They say, “Where’s the payoff? This is very expensive.” And it is. So, we don’t want to disrupt these business models that, in fact, may pay for it, because it’s unclear on how we’re going to pay for it.

So, I asked my friends in the unaffiliated-applications world three questions:

Number one, what, specifically, do you want? OK, Verizon’s doing 30 million megabits to all their customers. Do they want a dedicated 30-million-bit capability to all their customers? If they do, it’s going to cost a bundle.

Number two, how much is it going to cost? The more you build into the network, the more expensive it is. And some of these proposals are calling for some very, very expensive provisioning in the network.

And, number three, who’s going to pay for it? If you build all this into the network, and they decide they don’t want to buy it, who’s going to pay for it? The consumers?

So, we’re concerned, we’re a little nervous about this. Because we—we think you’ve made a lot of progress. Video franchise reform is going to get telephone companies into the video business. The cable companies are going after the telephone business. They’re both competing—notwithstanding what Paul said, they’re both competing now in the broadband Internet access business. I’ll be glad to share pricing data to show you that it’s a very competitive market. If it weren’t, prices wouldn’t be falling.

And we don’t want to kill the goose. Now we want to get video franchising relief, so telephone companies can enter into the video market. We can continue to move next-generation broadband forward. Consumers can capture the benefit of competition in the video marketplace today. Cable TV rates will go down.

Let’s get this done. Let’s not get embroiled in this net neutrality debate. Let’s move forward on the things we can agree on. Let’s move forward on Universal Service. Let’s get things done and worry about this other issue later on. It’s not as if there’s not a concern in this town about this issue. We believe that action will be taken—by the FCC, by the Congress, by the courts—if someone misbehaves.

So, we’d encourage you to be very, very careful as you move into this space.

[The prepared statement of Mr. Regan follows:]

PREPARED STATEMENT OF TIMOTHY J. REGAN, SENIOR VICE PRESIDENT,
GLOBAL GOVERNMENT AFFAIRS, CORNING INCORPORATED; ON BEHALF OF
TELECOMMUNICATIONS INDUSTRY ASSOCIATION

Mr. Chairman, I'm pleased to accept your invitation to testify today on behalf of both Corning Incorporated and the Telecommunications Industry Association.

As you know, Corning is the inventor of low-loss optical fiber. We invested hundreds of millions of dollars to prove to the world that data can be transmitted over extremely long distances using glass fibers as thin as hair.

Corning is also a member of the Telecommunications Industry Association (TIA). TIA provides a forum for over 600 member companies, the manufacturers and suppliers of products, and services used in global communications. Many TIA members manufacture and supply products and services used in the deployment of the broadband infrastructure that enables the distribution of information in all its forms including video programming.

We approach telecommunications policy from a very simple perspective. The question for us is: What policies will facilitate investment in network technologies to promote facilities-based competition in the interest of both producers and consumers?

Contrary to popular view, we do not see the issue before Congress as a matter of choosing sides among the titans. Rather, we see the challenge as one of encouraging and allowing all parties to do their part in developing the most robust broadband communications network in the world. This is the outcome that will provide the greatest benefit to all Americans.

Mr. Chairman, I know that this hearing is about net neutrality. But I think it is important to see the issue in the context of one of the primary objectives of the Stevens-Inouye bill—accelerating deployment of next-generation broadband capacity, and capturing the consumer welfare benefits of competition in the cable television market. With this in mind, I will take a few moments to discuss our views on these important matters.

The First and Second Broadband Technology Shifts

We think it is helpful to review the recent history of broadband technology. Essentially, we believe there are two technology shifts occurring in broadband.

The first broadband technology shift is from dial-up Internet access to current-generation broadband access. This is characterized as a shift from 56 kilobit-per-second narrowband capability to around 1.5 megabit-per-second (Mbps) broadband capability—roughly a 20-fold capacity expansion.

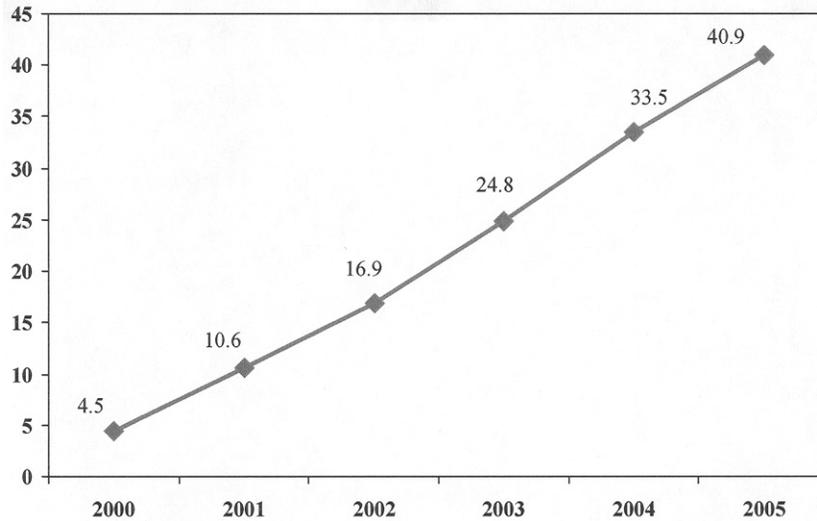
The second broadband technology shift is from current-generation to next-generation broadband access, characterized by yet another 20-fold capacity, from 1.5 Mbps to as much as 25–30 Mbps.

To give you an example of the effect of these two shifts, let me use the analogy of a highway. The first broadband technology shift is like going from a two-lane highway to a 40-lane highway. The second shift is like going from 40 lanes to 800 lanes. Just imagine I–95 going from 2 to 40 to 800 lanes.

The good news is that the first shift is well on its way. Progress in technology deployment is often measured by the substitution of the new for the old. By this measurement, tremendous progress has been made in the deployment of broadband. Broadband subscribership has increased by more than 800 percent from 4.5 million in 2000 to 40.9 million in 2005, while dial-up subscribership peaked at 47.3 million in 2002, and has since declined to about 40 million subscribers, the level that existed in 2000.¹

¹See Telecommunications Industry Association, *Telecommunications Market Review and Forecast*, 2005.

U.S. Current Generation Broadband Subscribers (in Millions)

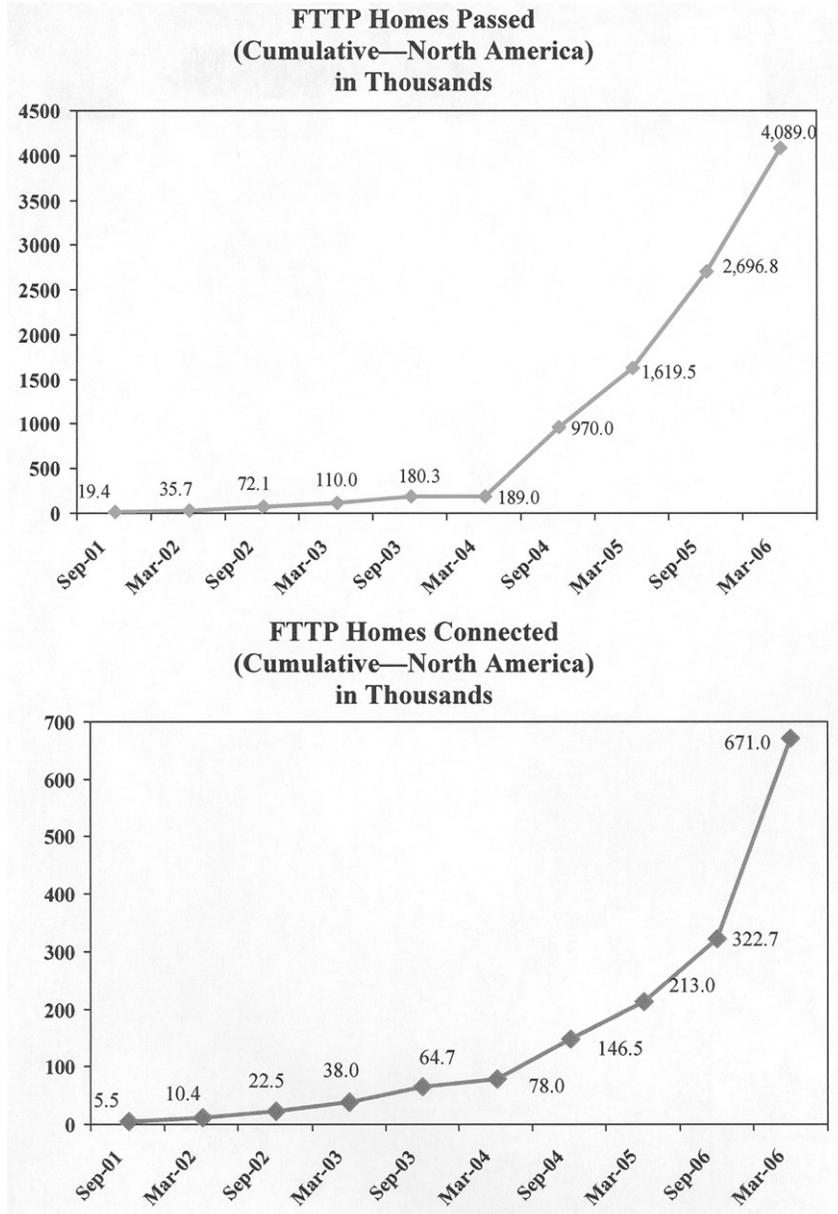


Source: In-Stat/MDR, FCC, TIA, Wilkofsky Gruen Associates

The second broadband technology shift has just begun and involves a number of different technologies, including fiber to the premises (FTTP), fiber to the node (FTTN), fiber to the curb (FTTC), VDSL, DOCSIS 2x and DOCSIS 3.0, satellite and various wireless technologies, all of which hold great promise and are in various stages of development and deployment.

Although TIA companies are involved in all of these technologies, I am most familiar with FTTP and will confine my remarks regarding the second broadband shift to that technology. With respect to FTTP, the second stage shift, although in its infancy, has been profound. From September 2001 to March 2006, FTTP deployment increased from 19,400 homes passed to 4.1 million homes passed, a 20,000 percent increase in four and a half years. FTTP subscribership increased from 5,500 in September 2001 to 671,000 in March 2006, a 12,000 percent increase over that period.²

²See RVA Research, *FTTH/FTTP Update*, Jan. 2006.



Source: RVA Research

While Verizon accounts for much of the FTTP deployment in volume, the FTTP experience is broadly based. As of March 2006, FTTP had been deployed in 936 com-

munities across 47 states, with only a third of those communities served by Verizon.³

The Importance of Pro-Competitive, Deregulatory Telecommunications Policy

The first broadband technology shift was driven by four forces: competition, deregulation, consumer demand for bandwidth, and technology advancement. The Federal Government played a positive and significant role in the first two of those factors—competition and deregulation. In fact, significant Congressional support for deregulation spurred three major decisions by the FCC, which created a favorable environment for broadband investment: the cable modem decision of 2002,⁴ the Triennial Review Order of 2003,⁵ and, most recently, the DSL decision of 2005.⁶ Thus, the pro-competitive, deregulatory actions by the FCC and supported by Congress, have worked to encourage the first broadband technology shift.

To best facilitate the second technology shift, Congress should continue its pro-competitive, deregulatory stance. And indeed, Congress has already taken steps in this direction. Most recently, Congress adopted a “hard date” for the DTV transition⁷ which will release prime spectrum for the development of new wireless solutions. Congress has also encouraged the FCC to facilitate competition in the wireline voice market by applying the light hand of regulation for VoIP, which will enable cable companies and new entrants to compete with incumbent telephone companies.⁸

Promoting competition through deregulation in the video realm is the next logical step. Video is the application driver for the deployment of next generation broadband because video uses an enormous amount of bandwidth. Even with the latest compression techniques, a high-definition television signal uses approximately 8 to 9 Mbps, several times faster than current generation broadband. Therefore, a public policy facilitating entry of new video providers will result in the deployment of more robust infrastructure, increased competition, and consequent consumer benefit.

Specific Problems With The Current Video Franchise Process

We have spent a significant amount of time analyzing the effects of various local franchise requirements on next generation broadband deployment. For the sake of brevity, we will merely summarize our thoughts in that regard here and provide a more detailed discussion later in an annex to this testimony.

Problem 1: Delay

The franchise-by-franchise negotiating process established under the old monopoly framework is simply too slow, and unwieldy, to encourage the speedy entry of new providers. In recent filings at the FCC, large companies like Verizon and BellSouth, as well as smaller companies like Knology, Grande Communications, Guadeloupe Valley Telecommunications Cooperative and the Merton Group, have all provided examples of very protracted franchise negotiations, in some cases lasting years. The delayed entry of these competitive video providers results in less competition, less consumer welfare benefit, and delay in the second broadband technology shift. The solution is to automatically issue a franchise within a set period of time.

Problem 2: Build-Out

The second major problem with the current video franchise process is the practice of requiring new entrants to build out facilities beyond the area which they find economical. For example, in the case of a telephone company entering the video market, video deployment logically follows the existing wire-center footprint, which typically does not follow franchise area boundaries. If a telephone company wants to offer video service throughout a wire-center which covers, say, 30 percent of a local franchise area, the requirement to build out to the entire franchise area might well make it economically infeasible to provide video service *at all* within that franchise area. The solution, we believe, is to establish a franchise process which does not require such counterproductive build out requirements.

³ See RVA Research, *FTH/FTTP Update*, Oct. 2005.

⁴ See FCC GN Docket No. 00–185, CS Docket No. 02–52, (rel. March 15, 2002).

⁵ See FCC CC Docket No. 01–338, (rel. Aug. 21, 2003).

⁶ See FCC CC Docket No. 02–33, (rel. Sept. 23, 2005).

⁷ See Deficit Reduction Act of 2005, Pub. L. 109–171, Title III Digital Television Transition and Public Safety.

⁸ See FCC CC Docket No. 04–267, (adopted Nov. 9, 2004).

Problem 3: Extraneous Obligations

The Congress has already indicated its intent to limit payments for franchises by establishing in Title VI of the Communications Act that the 5 percent statutory franchise fee is a ceiling for payments “of any kind.”⁹ Yet, franchise authorities often seek payments that far exceed the 5 percent fee. These extraneous requirements increase costs and discourage the investment in next-generation broadband capability, thereby delaying the second technology shift. The solution, we believe, is to prohibit the imposition of extraneous cost beyond 1 percent of gross revenues.

Title III of the Stevens-Inouye bill addresses these issues. If it is enacted this year, we believe it will significantly accelerate deployment of next-generation broadband capability, and capture the consumer welfare benefits of competition in the cable TV space.

Treatment of Existing Video Providers

We are also pleased that the Stevens-Inouye bill would make its streamlined franchise process available to existing cable TV providers. We think this is very important in order to encourage investment by all providers and to spur healthy competition.

Municipal Broadband

To promote competition, Congress also should enable municipalities to deploy next generation broadband capability. Particularly regarding fiber to the premises, municipalities were among the early leaders, even though recent court decisions have slowed deployments in a number of states. Although we believe municipalities should consider all options before entering the telecom field, if municipal leaders feel that they must build their own networks in order to provide satisfactory broadband services to their constituents, they should have the freedom to make that decision.

The draft bill before you includes the statutory clarification to allow municipal entry, subject to a right-of-first-refusal provision requiring consideration of private sector offers to provide desired services. While we encourage private sector deployment where possible, we are concerned that the right-of-first-refusal requirement could create opportunities for litigation that delay broadband deployment for protracted periods.

Net Neutrality

With the foregoing as background, I will now turn to the topic of net neutrality. We believe strongly that Congress should be very careful to avoid taking action which could, in fact, do harm. This principle must be applied to net neutrality.

As leading manufacturers of network equipment, we have a great interest in ensuring that broadband networks are not only *built*, but also *used*. Although consumers typically do not come in direct contact with network equipment, it is still the consumer that determines the success or failure of our technology. If consumers are satisfied with the broadband experience, our technology is in demand. If not, our technology is not deployed. For that reason, consumer satisfaction is extremely important to us.

Accordingly, TIA and other members of the High-Tech Broadband Coalition (HTBC) were the first to adopt network *Connectivity Principles*. We urged their adoption by Federal policymakers and were delighted when the FCC did so last year. Pursuing this matter further, TIA recently released its *Broadband Internet Access Connectivity Principles*, which reaffirms and adds to the above-mentioned principles. We attach a copy hereto for your use.

TIA’s *Connectivity Principles* support the interests of both consumers and unaffiliated content providers. In short, they state that subscribers should get the capacity they pay for to connect to the Internet, access any content they want on the Internet as long as such content is lawful, use any applications they chose as long as such use does not hurt the network or other users, and attach to the network any device they choose as long as it does not harm the network.

Let me emphasize that we believe unaffiliated content providers, as consumers of bandwidth, should benefit from the *Connectivity Principles* just like retail subscribers.

But going beyond these *Connectivity Principles* gives us great pause because it is unclear what problem the legislation is designed to address. We have yet to see significant evidence of an actual problem. Rather, net neutrality advocates appear to be concerned about potential misdeeds rather than actual misdeeds.

⁹See U.S.C. Sec. 542(g)(1).

We find this troubling because legislating against potential misdeeds can have very bad, unintended consequences. We experienced this following passage of the 1996 Telecom Act and the FCC's use of an unbundling regime, which retarded investment in local broadband access by incumbent local exchange carriers. This was an unintended negative consequence.

The goal of the 1996 Act—fostering competition in local telephone service—was laudable. But, the impact on investment in local broadband access was very negative.

The lesson of unbundling is instructive. If policymakers take action which disturb the business models of the companies deploying next generation networks, the result may well be to delay or stop deployment. Then we all will suffer—the carriers, equipment vendors, content providers, and consumers.

Let me dig into that statement for a moment. To analyze what the carriers will do, it is important to consider three threshold questions they must ask:

1. *What specifically do unaffiliated-applications providers want from carriers?* Do they want carriers to offer to them the same bandwidth, speed, and other capabilities that carriers offer to retail subscribers? For example, Verizon offers retail subscribers an Internet access service on their fiber network at a tremendous speed of 30 mbps downstream and 5 mbps upstream. Do unaffiliated providers want Verizon to make the same offer to them so that they can have a 30 mbps connection to all their customers? Similarly, we understand that AT&T plans to build a network that can provide IPTV and Internet access using Internet protocol at a speed of 24 mbps downstream. Do unaffiliated providers want AT&T to provide them with a 24 mbps connection to all their customers? It is simply not enough to say we want “nondiscrimination.” This is a vague notion. We need clarity in order to make sound policy.
2. *How much will it cost to build a network that is capable of giving unaffiliated applications providers what they want?* Obviously, the more robust the network is in terms of bandwidth, speed, features, and functions; the more expensive it will be to build. In my previous example, if Verizon and AT&T are required to provision a network to provide every unaffiliated applications provider with a 30 mbps or a 24 mbps connection to all their customers, the cost to build the network would increase substantially. We need to understand the cost implications of the obligations unaffiliated providers want to impose on carriers. Again, we need clarity to make good policy.
3. *How much will it cost to build a network that unaffiliated providers want from carriers?* As I said, there is a cost involved in provisioning the network to meet the demands of unaffiliated providers. And, the cost may indeed be very, very high. If carriers build excess capacity to meet the needs of unaffiliated providers and they don't buy it, who pays? The consumer? The shareholder? It is simply unreasonable to require a carrier to build capacity without knowing who will pay for it. Otherwise, it is an open-ended commitment that will simply discourage investment or, worse yet, stop it. Again, we need clarity to make good policy.

For Congress, the third question is probably the most critical. Certainly, Congress does not want to require carriers to build excess capacity into their networks and pass the cost on to retail consumers. If this were to occur, most Americans who use Internet access for simple applications like e-mail will carry an enormous, unfair burden. Clearly, if unaffiliated applications providers want network capability—bandwidth, speed, quality of service, and content—they must pay for it.

We are unaware of any analysis that answers the three questions cited above—what, how, and who. So, we support the study element of the approach taken in the Stevens-Inouye bill to answer these and other questions before legislating.

Conclusion

In conclusion, let me suggest that Congress should proceed where there is consensus, and continue to work on issues where consensus does not exist. You have an opportunity to achieve real success this year which will accelerate deployment of next generation networks and benefit consumers through lower prices and improved services. Franchise reform, for example, is an issue which is long overdue and where there is great consensus. Net neutrality, on the other hand, is an issue where there is little consensus, and even less clarity. I would propose that Congress continue to examine the net neutrality issue until it is clear what the problem is, and what the solution should be.

We feel that it is crucial for the Congress to build on the pro-competitive, deregulatory Federal broadband policy actions that have been implemented since 2002. I am pleased that the Stevens-Inouye bill builds on these successful policy actions. I

urge the Committee to act quickly on franchise reform and other issues where there is a consensus so we can enact them this year. With such action, we can capture the benefits of accelerated broadband deployment and the consumer welfare benefits of competition now.

Annex 1: Detailed Discussion of Specific Problems With the Current Video Franchise Process

Problem 1: Delay

Unfortunately, the current video franchise process does not facilitate the entry of new video providers in a timely fashion. The franchise-by-franchise negotiation process established under the old monopoly framework is simply too slow and unwieldy to encourage the speedy entry of new providers. Verizon has filed documents with the FCC establishing that, to serve its entire target area with video service, it must negotiate between 2,000 and 3,500 franchises, excluding those in Texas.¹⁰ Verizon began negotiations with 320 franchise authorities in November 2004, and, as of February 2005, had only 26 franchises other than those that were automatically issued in Texas.¹¹ For those franchises that have been successfully negotiated, negotiation time has ranged between two months and 17 months, with an average of 7.65 months.¹² The more important focus, however, are the negotiations in which Verizon has *not* been successful: in over 80 percent of the franchise negotiations Verizon initiated in November 2004, a franchise still has not been granted.¹³

A similar situation has been experienced by BellSouth, which needs to negotiate 1,000 franchises. As of last month, it had received only 20 franchises, requiring between 1.5 months and 32 months of negotiation time for each, at an average of 10 months.¹⁴

Moreover, this is not just a problem for the Regional Bell Operating Companies. Smaller companies such as Knology, Grande Communications, Guadeloupe Valley Telecommunications Cooperative, and the Merton Group have all reported a similarly protracted period of franchise negotiations, ranging between 9 months and 30 months.¹⁵

The delayed entry of these competitive video providers results in less competition, less consumer welfare benefit, and delay in the second broadband technology shift.

Problem 2: Build-Out

The second major problem with the current video franchise process is the practice of requiring new entrants to build out facilities beyond the area which they find economical. For example, in the case of a telephone company entering the video market, video deployment logically follows the existing wire center footprint, which typically does not follow franchise area boundaries.¹⁶ If a telephone company wants to offer video service throughout a wire center which covers, say, 30 percent of a local franchise area, the requirement to build out to the entire franchise area might well make it economically infeasible to provide video service *at all*, within that franchise area.

This is not merely a whimsical example. We recently analyzed telephone company wire centers in Texas—where the characteristics of wire center deployment are typical of the Nation on average—and found that only 3 percent of the wire centers completely overlap the geographic area of franchise areas.

Therefore, the requirement that new entrants build out to an entire franchise area will result, in many instances, in potential competitors delaying or even abandoning plans to enter new video markets.

Again, this is not just a Bell Company problem. The National Telecommunications Cooperative Association has reported that many of its members, which tend to be small rural telephone companies, want to get into the cable business but have reported problems with local franchising authorities—particularly unreasonably short

¹⁰ See FCC MB Docket No. 05–311, *Comments of Verizon on Video Franchising*, Feb. 13, 2006, Attachment A at 5.

¹¹ See FCC MB Docket No. 05–311, *Comments of Verizon on Video Franchising*, Feb. 13, 2006, Attachment A at 4.

¹² See FCC MB Docket No. 05–311, *Comments of Verizon on Video Franchising*, Feb. 13, 2006, Attachment A, Exhibit 1.

¹³ See *supra* footnote 11.

¹⁴ See FCC MB Docket No. 05–311, *Comments of BellSouth Corporation and BellSouth Entertainment, LLC*, Feb. 13, 2006, at 10, 11.

¹⁵ See FCC MB Docket No. 05–311, *Comments of the Fiber-to-the-Home Council*, Declarations of Felix Boccucci, Andy Sarwal, Jeff Mnick, Terrence McGarty.

¹⁶ See FCC MB Docket No. 05–311, *Comments of Verizon on Video Franchising*, Feb. 13, 2006, at 40.

build-out periods, or requirements to build outside the carrier's own service territory.¹⁷

The solution, we believe, is to establish a franchise process which does not require such counterproductive build out requirements.

Problem 3: Extraneous Obligations

The third major problem with the current video franchise process is the imposition of extraneous obligations that exceed 1 percent of revenues.

The Congress has already indicated its intent to limit payments for franchises by establishing in Title VI of the Communications Act that the 5 percent statutory franchise fee is a ceiling for payments "of any kind."¹⁸ Yet, franchise authorities often seek payments that far exceed the 5 percent fee by imposing requirements like the assumption of all Public, Education and Government (PEG) costs incurred by the incumbent cable operator over the entire span of its service, the installation of institutional networks (I-Nets), the requirement to bury aerial plant, the assumption of applications and acceptance fees, etc.¹⁹ These extraneous requirements increase costs and discourage the investment in next generation broadband capability thereby delaying the second technology shift. The solution, we believe, is to prohibit the imposition of extraneous cost beyond 1 percent of gross revenues.

APPENDIX

Broadband Internet Access Connectivity Principles

TIA has long supported the rights of *broadband Internet access service* consumers to connect to and utilize their choice of legal Internet content, applications, and devices, while also recognizing the needs of service providers in a competitive market to manage the security and functionality of their networks. TIA reaffirms its pro-consumer principles, as outlined below, while continuing to observe that the lack of significant evidence of these principles being abused in the marketplace means there is no need at this time for the Federal Communications Commission to craft rules in this area.

1. A competitive broadband Internet access market offers consumers choices with respect to "connectivity"—that is, the ability to access any lawful Internet content, and use any device, application, or service over the public Internet—so long as they do not harm the network. In particular:

1.1. Consumers should receive meaningful information regarding their broadband Internet access service plans.

1.2. Broadband Internet access consumers should have access to their choice of legal Internet content within the bandwidth limits and quality of service of their service plan.

1.3. Broadband Internet access consumers should be able to run applications of their choice, within the bandwidth limits and quality of service of their service plans, as long as they do not harm the provider's network.

1.4. Consumers should be permitted to attach any devices they choose to their broadband Internet access connection, so long as they operate within the bandwidth limits and quality of service of their service plans, and do not harm the provider's network or enable theft of services.

2. A competitive broadband Internet access market also gives facilities-based broadband Internet access providers competitive incentives to undertake risky, new investments, while precluding anticompetitive behavior against unaffiliated businesses. In particular:

2.1. Broadband Internet access service providers should remain free to engage in pro-competitive network management techniques to alleviate congestion, ameliorate capacity constraints, and enable new services, consistent with the technical characteristics and requirements of the particular broadband platform.

2.2. Broadband Internet access service providers should remain free to offer additional services to supplement broadband Internet access, including speed tiers, quality of service tiers, security and spam services, network management services, as well as to enter into commercially negotiated agreements with unaffiliated parties for the provision of such additional services.

¹⁷ See FCC MB Docket No. 05-311, *Comments of the National Telecommunications Cooperative Association*, Feb. 13, 2006, at 4, 5.

¹⁸ See U.S.C. Sec. 542(g)(1).

¹⁹ See FCC MB Docket No. 05-311, *Comments of Verizon on Video Franchising*, Feb. 13, 2006, at 57-75.

2.3. Such network management tools would enable operators to continue to optimize network efficiency, enable new services, and create incentives for continued build-out to meet increasing capacity demands.

2.4. Broadband service providers should also remain free to innovate in the deployment of managed services, such as packaged video programming, which utilize the same networks but are distinct from public Internet access services.

TIA believes that the FCC has jurisdiction to vigilantly monitor the broadband Internet access service market and expeditiously review any complaint of anti-competitive activity. However, as no significant evidence of a problem exists at this time, it is not now necessary for the FCC to promulgate detailed rules in this area. Rather, the FCC should address any such problems on a case-by-case basis in the event they arise.

Senator INOUE. Thank you very much.
Mr. Scott?

**STATEMENT OF BEN SCOTT, POLICY DIRECTOR, FREE PRESS;
AND ON BEHALF OF CONSUMERS UNION AND CONSUMER
FEDERATION OF AMERICA**

Mr. SCOTT. Mr. Chairman and members of the Committee, I thank you for the opportunity to testify today.

I am the Policy Director for Free Press. We're a public-interest organization dedicated to public education and consumer advocacy on communications policy.

Like my members, I bring to the table a public-interest conviction that bears no burden of special interest. We simply believe that the future of a nondiscriminatory Internet is vital to our economy and our democracy.

In the last few months, Free Press has had the privilege of being in the center of an explosive grassroots coalition that includes almost three-quarters of a million citizens and 700 organizations, all of which you can visit at *SaveTheInternet.com*. All of these folks are focused on the unlikely issue of network neutrality.

The list grows every day, largely because of the prolific efforts of Internet citizen journalists. Together, the audience of the net neutrality bloggers exceeds the readership of the *New York Times*, the *Wall Street Journal*, and the *Washington Post* combined. This is the online democratic public sphere in potent action. It is the creation of the neutral platform on the Internet that embodies the very principles that we are now fighting to protect. The coalition is left and right, it is commercial and noncommercial, public and private. Supporters of the network neutrality issue now include the Christian Coalition and *MoveOn.org*, the National Religious Broadcasters, SEIU, the American Library Association, AARP, and every major consumer organization working on communications policy in the country. It includes the founders of the Internet, the brand names of Silicon Valley, and a block of retailers, innovators, and entrepreneurs.

Coalitions of such breadth and depth and purpose are extremely rare in contemporary politics, and I encourage the Committee to take careful note.

We share a fundamental belief that network neutrality is non-discrimination. Network neutrality is what keeps the market power of the few from distorting the free market of the many. It is a simple concept running through a century of American public policy.

At its base, the bill now being considered before the Committee poses a decision about who will control the Internet: consumers and producers in the competitive marketplace, or network owners in a noncompetitive marketplace. The Internet has become a positive economic and social force in our society because of the principles of nondiscrimination. To restructure communications law without including fundamental protections of nondiscrimination would undermine the primary reason for our success. Net neutrality, let's be clear, has existed in the law for the entire history of the Internet. We are not asking for anything new. We're asking for the preservation of tried and tested consumer protections that have made the Internet the greatest engine of economic growth and democratic communication in modern memory.

Network discrimination through a so-called "tiered Internet" will severely curtail consumer choice. We're not dealing with a hypothetical situation. Since August of 2005, when discrimination first became legal, the network owners have very publicly announced their intentions to set up gatekeepers on the Internet. This is unacceptable. Consumers, not network operators, must choose winners and losers in the market. It is impossible to ignore that the cozy duopoly of telecom and cable companies that control residential broadband markets will not use that power to discriminate against the content and applications providers. Absent network neutrality protections, consumers will experience higher costs and fewer choices. There is no free ride on the network. The higher cost of a tiered Internet will simply be passed through to consumers. And, frankly, there are no economic incentives for telephone companies, who are already the recipients of billions in public subsidies, that are worth sacrificing the consumers' free market of Internet content and services. Network discrimination will stifle innovation and cripple investment at the edge, as well as in the center.

This is how—how many venture capitalists will embrace a business plan if the first line of that business plan is, "strike a favorable deal with AT&T"? That is simply a nonstarter for entrepreneurs, and especially in the case of the online marketplace. The best ideas do not always come from the deepest pockets. Therefore, we believe that network neutrality must be a central component of the bill before the Committee. We urge you to put net neutrality back in where it belongs, as the cornerstone of communications policy. We believe the current bill must be revised to include far more than an FCC study of the issue. If we just study the issue, we will very likely have the effect of losing net neutrality altogether.

We highly recommend adopting the Internet Freedom Preservation Act recently introduced by Senators Snowe, Dorgan, and Inouye. The bill would not only prevent network operators from blocking and impairing access, but also appropriately prohibit discrimination and preferential pricing. It is a straightforward mechanism for guaranteeing nondiscrimination. The future of the Internet should be handled just like the birth of the Internet, by maximizing innovation, consumer choice, and democratic opportunity.

I thank you for your time and attention.

[The prepared statement of Mr. Scott follows:]

PREPARED STATEMENT OF BEN SCOTT, POLICY DIRECTOR, FREE PRESS; AND ON
BEHALF OF CONSUMERS AND CONSUMER FEDERATION OF AMERICA

Summary

Free Press,¹ Consumers Union,² and Consumer Federation of America,³ appreciate the opportunity to testify on the Communications, Consumer's Choice, and Broadband Deployment Act of 2006. As consumer advocates, we strongly support policies that will bring more broadband competition to American households. However, we believe any legislation that reshapes critical elements of telecommunications law, such as video franchising and the Universal Service Fund, must necessarily reaffirm the commitment of the Congress to the principle of nondiscrimination on the Internet.

Meaningful, enforceable network neutrality provisions must be a central element in the Communications, Consumer's Choice, and Broadband Deployment Act of 2006. We strongly urge the adoption of The Internet Freedom Act, introduced by Senators Snowe and Dorgan, as part of S. 2686. Without it, S. 2686 cannot deliver on its promise for more competition and enhanced broadband access.

Network neutrality protections have existed for the entire history of the Internet. Consumer advocates are not promoting new regulations. We are asking the Congress to preserve tried and tested consumer protections, and network operating principles that have made the Internet the greatest engine of economic growth and democratic communication in modern memory.

Network neutrality must continue to be a central component of 21st century communications policy. This committee faces a clear policy choice. At its base, this is a decision about who will control the Internet—consumers and producers in a competitive marketplace where innovators and entrepreneurs are rewarded by consumers, or network owners in a non-competitive, gatekeeper-controlled marketplace dominated by the cable-telephone duopoly who have both the incentive and now the ability to exclude competitors. The Internet has become a powerful economic and social force *because* long-standing principles of nondiscrimination have maintained the Internet as a neutral platform, protecting the free market and the democratic public sphere of online commerce and communication. To restructure communications law without restoring fundamental protections of network neutrality would stifle the tremendous economic growth and innovation that nondiscrimination rules have fostered.

Network discrimination through a "tiered Internet" will severely curtail consumer choice. In the wake of flawed FCC rulings deregulating broadband in 2005, network owners have very publicly announced their intentions to scrap the neutral Internet and position themselves as gatekeepers of content, applications, and services. This has been, and should remain, the exclusive purview of consumers.

Consumers, not network operators, must be allowed to continue to choose winners and losers in the content and applications marketplace. Consumers can be offered a choice of different levels of network service, as they always have been, but then any content, application, or service that can be delivered at the consumers chosen network service level should be allowed to without interference or additional charges imposed by the network operator. Without network neutrality, telephone and cable companies will have a strong financial incentive to distort the free market in favor of their own content and services. This activity will stifle entrepreneurship and abolish "innovation without permission."

Absent network neutrality protections, consumers will experience higher costs and fewer choices for broadband. The higher costs of a "tiered Internet" levied on millions of online content providers will simply be passed on to consumers, directly or indirectly. There is no "free ride" on the network, and consumers will bear the costs of network development through higher access charges and higher prices for online goods and services. Moreover, a "tiered Internet" will further concentrate the market power of the cable modem and DSL duopoly, eliminating competition in the conduits, and leaving consumers with no escape from content discrimination. Alternative approaches to broadband policy and infrastructure development are both more competitive and economically efficient. There exists no compelling economic reason to eliminate consumer choice with a "tiered Internet."

Consumer support for network neutrality represents an unprecedented level of public involvement in communications policy. Supporters of network neutrality represent a broad, nonpartisan coalition that joins both the right and left, and commercial and noncommercial interests. The campaign to preserve network neutrality protections is perhaps the most diverse set of public and private interests backing any single policy issue in Washington today. Hundreds of groups, and hundreds of thousands of individuals from across the political spectrum are joining together to save this cornerstone principle of consumer choice and Internet freedom. For consumers,

this debate should not be about whether we should have nondiscrimination in 21st century communications policy. This debate should be about how best to accomplish this essential and long-standing policy principle of nondiscrimination.

Network Neutrality Protections Have Existed Since the Birth of the Internet

Network neutrality boils down to the principle of *nondiscrimination*, which has been foundational in communications law for generations. It is a central reason why the Internet has proven to be the greatest engine of economic growth and democratic communication in modern memory. The development of the Internet and the online marketplace did not occur by accident. It happened with the help of sound public policies. Nondiscrimination and the structural separation of content and conduit in telecommunications networks were chiefly responsible for the dynamic growth of the Internet environment. The architects of the Internet were acutely aware of the centrality of regulatory protections that would guarantee standardized protocols, and a neutral platform. The Internet's emerging promise in the mid-1990s as a platform for commerce, information sharing, and democratic cultural discourse were premised upon keeping the network open, nondiscriminatory, and operating as a pure free market. Nondiscrimination rules simply guarantee equal treatment for every online speaker—from large corporations to small businesses to citizen websites. Conceptually, it is the First Amendment for the Internet.

Tim Berners-Lee, the inventor of the World Wide Web, reflects:

“When seventeen years ago, I designed the Web, I did not have to ask anyone’s permission . . . The Internet is increasingly becoming the dominant medium binding us. The neutral communications medium is essential to our society. It is the basis of a fair competitive market economy. It is the basis of democracy, by which a community should decide what to do. Let us protect the neutrality of the net.”⁴

Consumers take for granted that every website and application on the Internet is treated equally. That is largely because we have had fundamental protections in the law that guarantee nondiscrimination since the birth of the Internet. Nondiscrimination is a basic obligation of all network operators under Title II of the Communications Act. Almost 40 years ago, the Federal Communications Commission was confronted with the question of how to handle the transmission of data over the telephone network. In a series of proceedings beginning in 1968 known as the *Computer Inquiries*, the FCC decided that the companies providing communications services would not be allowed to interfere with or discriminate against information services.⁵ When the courts broke up Ma Bell in 1982, it required the Baby Bells to provide nondiscriminatory interconnection and access to their networks.⁶ These decisions to require the communications network to treat information services in a nondiscriminatory manner established one of the key building blocks of the Internet.

The idea is simple. Under the law, the physical wires over which data and information flow are treated differently than the data and information themselves. The number of physical networks to transmit data and information is very small and non-competitive (at best, most consumers have a choice of only cable or DSL). Public policy keeps the owners of these networks from using their monopoly (or duopoly) market power over the wires to discriminate against the information providers on their networks. If the network owners’ non-competitive, discriminatory practices are held in check, the content market remains free and vigorously competitive. If they are not, it will be distorted. The separation of the physical communications layer from the content and applications layers is a cornerstone of telecommunications law. It established an “end-to-end” network, putting control of the Internet in the hands of the users at the edges.⁷

But in the summer of 2005, the FCC removed the cornerstone of nondiscrimination. This decision was the culmination of several years of litigation. After years of bombardment by lobbyists and lawyers from the cable and telephone giants, the FCC first tried to take away nondiscrimination protections in 2002. The courts reversed them.⁸ But the cable companies and the FCC kept appealing, and eventually the Supreme Court heard the matter in July 2005. In the case of *NCTA v. Brand X*, the Court ruled simply that the FCC had the authority to make the decision, good or bad. It did not rule on the merits. As a result, last August, in the midst of the Internet revolution, the FCC handed total control over broadband networks to the telephone and cable companies to do as they please, removing broadband from the protections of Title II of the Communications Act. Among the many protections lost was the principle of nondiscrimination.⁹ It must not be allowed to lapse permanently.

In the months since then, cable and telephone network owners have openly declared that they intend to build a business model based on discrimination, extorting money from every online content and applications provider. This plan violates the fundamental principle of nondiscrimination that has been law for generations and which gave us the Internet. It would have been prohibited less than a year ago. And it threatens to end the Internet as we know it. The only barriers standing in the way of this scenario are temporary extensions of nondiscrimination protections resulting from a one year “sunset” period that applies to the FCC’s August 2005 ruling and merger conditions applied to MCI-Verizon and SBC-AT&T.

Advocates of network neutrality are not promoting new regulations. We are preserving tried and tested consumer protections and network operating principles that ensure Internet freedom and which are responsible for the Internet as it exists today.

Network Neutrality Must Be a Central Component of 21st Century Communications Policy

This committee faces a clear policy choice with the treatment of network neutrality in the Communications, Consumer’s Choice, and Broadband Deployment Act of 2006. At its base, this is a decision about who will control the Internet—consumers and producers in a competitive marketplace, or network owners in an anti-competitive marketplace. The destruction of nondiscrimination principles would mean fundamental, devastating changes to the Internet as we know it.

In our view, this cannot be a debate about whether we should have network neutrality. It is about what network neutrality protections will look like now that broadband is no longer governed under Title II of the Communications Act. This issue is fundamental to the legislation currently under consideration. The Communications, Consumer’s Choice, and Broadband Deployment Act of 2006 is a broad reform of communications law. Major changes to video franchising and the Universal Service Fund are designed to transition the Nation into the broadband era. This committee recognizes that the Internet is the dominant communications medium in our society. But it has become dominant economically, socially, and politically *because* of the principles of nondiscrimination that have protected the free market and the democratic public sphere of online commerce and communication. To restructure communications law without including fundamental protections of network neutrality would be to undermine the primary reason for our success.

The future of the Internet should be handled just like the birth of the Internet—by maximizing consumer choice. Unequivocally, consumer advocates have argued successfully for well over a decade that the baseline protection of network neutrality must be preserved to guarantee a free and competitive online marketplace.¹⁰ The genius of the Internet, the catalyst of economic growth, democratic discourse, and social opportunity it has become, is based on the foundation of nondiscrimination. The market has worked beautifully because the barriers to entry were low and the status of every actor in the marketplace remained equal. This is a competitive market at its finest, but it is premised on that neutral platform. Remove the neutral footing, and the market tips in favor of the network owners.

Network Discrimination Through a “Tiered” Internet Will Severely Curtail Consumer Choice

The removal of network neutrality as a consumer protection will fundamentally change the Internet for the worse. Among the first casualties will be the free market for content, services and applications, and the Internet’s innovation engine.

Content Discrimination

When consumers log onto the Internet, they take for granted the ability to access content however and whenever they like. They assume the availability of any online feature they choose—watching online video, listening to podcasts, searching, e-mailing, and instant messaging. What they are assuming is the practical reality of nondiscrimination, or network neutrality. From the consumer perspective, network neutrality is the idea that the Internet should be open and free, unrestricted by anyone.

The network owners—cable and telephone companies—would like to charge extra tolls (beyond access charges that online content and service providers already pay) for smooth access to websites and sufficient speed to run applications and devices. The goal is the creation of a “tiered” Internet. The executives of these companies have repeatedly announced their intentions in the mainstream press, including the *Wall Street Journal* and the *Washington Post*.¹¹

The idea of a discriminatory or “tiered” Internet is based on a simple concept: the network owner intervenes between the consumer and the content provider to charge fees for delivery to the consumer. Under neutrality rules, the network owners charge the customer for communications services, and any application or content

that works within that level of service must be allowed to flow—no questions (or additional fees) asked.

The network operators also charge content, applications, and service providers to send their wares through the network; but they must offer nondiscriminatory rates, terms, and conditions to everyone. The network operator has nothing to say about the transaction between customers and the service providers once both have paid their fee to access the network. Consumers make their own choices, and application developers have a fair chance to win the customer without interference from the network operator.

Without network neutrality, the network operator has total control. Different fees can be charged based on the type of service (voice, video, or data); different fees can be charged based on the type of provider (individual, small business, or big business); different fees can be charged based on the affiliation of the provider with the network operator; different fees can be charged to guarantee delivery at a particular rate of speed or quality; different fees can be charged based on political affiliation or the day of the week. In fact, without neutrality rules, the network owners can charge whatever they want, to whomever they want, for any reason they choose.

They can create “fast lanes” and “slow lanes” and decide who gets to be in each. There is nothing to stop AT&T from pushing content providers into exclusive deals denied to Comcast or Time Warner subscribers. There is nothing to stop Verizon from slowing down websites they dislike and speeding up others with impunity. There is no reason why BellSouth could not make a deal with Amazon to make it the preferred online book retailer on its network. There is nothing to stop discrimination for social, economic, or political reasons. This has been dubbed the “Tony Soprano” business model: Stand between content and consumers; demand a cut from strangers; let your friends go for free. Naturally, the network owners promise that they will commit none of the more egregious acts of extortion available to them. But they will not be prohibited by law from doing so.

Network neutrality keeps telephone companies off of consumers’ backs and out of their wallets. Consumers should choose winners and losers in the content marketplace based on the merits of a website or service; network owners with strong financial incentive to distort the free market should be prevented from doing so.

Stifling Innovation

In the words of Internet architect Vint Cerf, the Internet is “innovation without permission.” That is the genius of the network that has proven to be a wonderland for entrepreneurs. It is critical to remember that the Internet’s name brands of today were just a good idea in a garage a decade ago. College kids created Google. A hobbyist conceived the idea for eBay. A teenager wrote the code for Instant Messaging. Some of the most popular sites on the Internet today—MySpace, FaceBook, and YouTube—did not exist three years ago. This technological revolution keeps turning because the Internet is an unrestricted free marketplace of ideas where innovators rise and fall on their merits.

The laws that protect this free market are network neutrality rules. Without the rules, innovators are at the mercy of the network owners to say who can and cannot succeed. We are back in the Tony Soprano model, where building a new online business requires paying protection money to the boss. Any entrepreneur that lacks the money to make a deal, or the ability to draw the interest and privilege of a network operator, is out of luck.

The repercussions of simply raising money from investors in a world without network neutrality will be devastating to innovators. How many venture capitalists will embrace a business plan if the first line reads: “Strike a favorable deal with AT&T?” That is simply a non-starter for entrepreneurs that will stifle innovation. The best ideas do not always come from the deepest pockets.

Or, assume that a new business does beat the odds and gains a foothold in the online marketplace. What happens when it begins to compete with a service that is partially owned by the network operator? What happens when the fees for the fast lane are tripled? What happens when service is degraded at a prime time for business, like the holiday shopping season? Will investors continue to sink money into a company with these kinds of market uncertainties?

Is this scenario hypothetical? Not at all. Hardware manufacturers currently advertise routers that have the ability to investigate the packets flowing onto a network to determine the origin of the content or application. If the content comes from a “preferred” provider that has made a deal with the network, it is guaranteed quality of service.¹² If the content is from an unaffiliated source, the router can deprioritize the content and degrade the service. Network operators are already planning to manage bandwidth to maximize revenue streams through discriminatory

deals with third-party providers. This distorts the market, undermines competition, and smothers innovation.

Up to this point, the consumer has been the ultimate decision-maker on the network. The network owner simply transmitted data over wires, regardless of the source of that content. A “tiered” Internet installs the network owner as the gatekeeper of Internet content and applications. The result will be a cartel of super-fast websites that pay for the privilege of speedy consumer downloads, relegating the equal-opportunity Internet to the dustbin of history.

The Internet will begin to look more and more like cable TV. The owner of the network will pick content from a handful of other corporate media producers, and those will make up a limited menu of featured services with guaranteed quality. Everyone else will be a second-class citizen on the Internet. Instead of a thousand flowers blooming—including the independent voices that are now virtually absent from the mainstream media—we will have the channels that the network owners decide to deliver. Without network neutrality, we give network owners the power to become the gatekeepers of the Internet. This is terrifically bad news for the most democratic communications medium we’ve ever known.

Absent Network Neutrality Protections, Consumers Will Experience Higher Costs and Fewer Choices for Broadband

The network operators are fond of telling consumers that by stripping consumer protections like network neutrality, they will be saving money on their monthly bills. The notion is that the new discriminatory fees laid on Internet content and service providers for guaranteed delivery will subsidize some of the freight consumers once carried alone. They argue that consumers will pay the same (or less!) and get better service from the selected content providers that choose to buy their way into the fast lane.

Economics 101 suggests a different storyline. In reality, consumers will pay the tab, one way or another—either by paying transparent monthly rates for access (with net neutrality left on the books) based on the level of service they demand, or through higher prices for consumer goods and Internet services (with net neutrality stripped out). Moreover, to the extent that the network operators are successful in undermining their competition, they will be able to raise prices.

Popular Internet content providers like Google, Amazon, Yahoo!, and eBay are not going to simply swallow those extra costs levied on them by AT&T and Verizon. They will pass them along to consumers one way or another. Companies (like Google and Yahoo!) that have built their franchise on free services supported by ad revenue will simply raise their advertising rates. Higher advertising rates will result in higher consumer prices on all the goods that advertise on these sites. Other companies (from Amazon to eBay vendors) who sell goods and services online will have to raise their rates to account for the extra charges. In other words, Amazon, eBay, and every small business that sells on the Web will have to charge more. iTunes and all the pay-per-download content sites will have to charge higher rates as well, just to send their cut to AT&T and Verizon. Content sites like YouTube, MySpace, and video blogs may have to start charging for access to sustain their quality of service. Consumers are going to get hit in the wallet either way. But they’re likely to do better in a transparent, competitive market with unlimited choices than by hoping AT&T, Verizon, or Comcast will keep their promises.

Network Discrimination Is Not Necessary To Promote the Deployment of Broadband Networks

Network operators will build out their high-speed networks whether there are network neutrality rules or not. The cable companies have largely built out their networks already. One way or another, telephone companies will upgrade their copper wires to compete with cable. They would have done so even if they had lost the *Brand X* case and the nondiscrimination rules still existed. The only reason they are claiming they need discriminatory pricing is because they see an opportunity to extract monopoly rents from a new source.

There is no economic reason why nondiscrimination must be sacrificed to develop infrastructure. The pipe companies will generate the revenue to build networks in the same way they always have—from three sources. First, they will continue to receive billions of dollars every year from the monthly subscription fees paid by retail and enterprise consumers. Second, they will continue to receive billions of dollars every year from the access charges they receive from Internet content producers whose goods and services travel over their networks. (That’s right—Internet companies already pay big bucks to be on the Internet. Any network operator who feels shortchanged can raise the rates, provided they do so a nondiscriminatory basis.) Finally, network operators will generate revenues by entering the content and appli-

cations market and competing for consumer dollars the old-fashioned way—earning them in the free market.

It is worth noting that the recent financial history of the large telephone companies suggests they have not been particularly serious about infrastructure investment. Since 2000, the annual reports of SBC and Verizon indicate that they have depreciated billions of dollars more than they have spent on their networks.¹³ Instead, they have laid out capital to purchase other telephone companies—reducing competition and increasing market power. In effect, these companies have been *disinvesting* in their infrastructure. If they now project increases in infrastructure spending, that reflects the fact that they are working from years of deficit. AT&T, which is making the most noise about charging discriminatory fees, has the worst track record of investment, having taken \$9 billion more in depreciation expenses than it has laid out in capital expenditures in the past four years.¹⁴

Approaching the situation through a slightly different lens, AT&T's path back to Ma Bell status involved the conglomeration of SBC, Ameritech, PacBell, SNET, and AT&T Wireless, at a cost of roughly \$140 billion. In the process, their market capitalization increased only \$40 billion. Ironically, the \$100 billion that disappeared is roughly what it would cost to run fiber to every American household.¹⁵

Now AT&T is lining up to spend another \$67 billion on BellSouth, while Verizon has a \$38 billion offer on the table to buy out its partner in Verizon Wireless. And yet they expect consumers to believe that they are short on capital and cannot afford to build their network without the elimination of consumer protection rules. Even in a world of Enron accounting, the idea that there is no revenue in the industry to upgrade the networks is a tall tale.

Facilities-Based Competition Is Far Too Weak To Protect Consumers From Anti-Competitive, Anti-Consumer Discrimination

The network owners have argued that network neutrality is an unnecessary protection because there is sufficient competition in the broadband market to deter bad behavior. Put simply, they argue that if Verizon degraded access to a site or created a discriminatory “fast lane” that consumers disliked—they would lose customers to the other network operators in the area.

But consumers must have robust competition and multiple choices of broadband providers for this theory to work.¹⁶ Such competition does not exist, and it isn't likely to exist in the foreseeable future. Most Americans have access, at best, to two broadband providers—cable and DSL. That's it. These two companies dominate over 98 percent of the broadband market. The share of the market held by all the other broadband technologies combined—satellite, fixed wireless, mobile wireless, and broadband-over-power-lines—actually *decreased* over the last few years.¹⁷

A significant chunk of the country has only one broadband provider, and around 10 percent of households have none at all.¹⁸ This is hardly a competitive market. Certainly there is insufficient competition between different technologies to produce any kind of deterrent. If both the local cable and telephone companies are using their networks to discriminate, the consumer is trapped. There is nowhere to go. That's why nondiscrimination through network neutrality is so critical for the content and application layer of the Internet. Without network neutrality, the telephone and cable duopoly will leverage their market power over the network to gain control over the content and application markets, establishing a handful of wireline companies as the gatekeepers of the Internet.

Conclusions and Recommendations

Civic engagement on network neutrality represents the most diverse public response to a communications policy issues in recent history. A grassroots effort led by the “Save the Internet” Coalition (www.savetheInternet.com) includes nearly 700 organizations, from small community groups to large national organizations. Banded together in this coalition are the Gun Owners of America, Feminist Majority, Parents Television Council, American Library Association, Consumers Union, and Educause. Network neutrality is also supported by AARP, the ACLU, the Christian Coalition, and the National Religious Broadcasters.

More than 700,000 individuals have signed a petition to Congress demanding Internet freedom through meaningful network neutrality. Thousands of bloggers of all political stripes and interests, from Daily Kos and Instapundit to video gamers, musicians, and educators, have championed the issue and encouraged public involvement in the campaign. The world's most renowned experts on Internet technology, law, and policy have written prominently on the issue. This massive civic coalition stands next to a similarly large and unprecedented coalition in the commercial sector, joining together the Internet content and technology industries. Google, Amazon, Intel, Microsoft, and eBay, are joined by hundreds of smaller on-

line retailers and technology firms. The campaign to preserve network neutrality protections is perhaps the most diverse set of public and private interests backing any single issue in Washington today.

Recommendations

We urge the Committee to replace the current language in the Title X of the Communications, Consumer's Choice, and Broadband Deployment Act of 2006 with the provisions of The Internet Freedom Preservation Act, introduced by Senators Snowe and Dorgan. Merely directing the FCC to study the issue of network neutrality is insufficient to address this important policy priority. Once network operators begin to re-engineer the Internet to create a discriminatory system, it will be too late. The genie cannot return to the bottle. On the contrary, Congress must pass legislation that articulates a clear and enforceable affirmation of the principle of non-discrimination. This will eliminate regulatory uncertainty and allow competition in the physical and applications layers of the Internet to resume a natural course. The consequences of inaction or half-measures will be severe.

We recommend against simply adopting the FCC's four vague "policy principles"—concepts that were never designed to be codified into regulation. The principles read as follows:

- Consumers are entitled to access the lawful Internet content of their choice.
- Consumers are entitled to run applications and 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.¹⁹

That sounds good, but the interpretation and implementation of such vague concepts will be almost impossible. FCC Chairman Kevin Martin has already indicated publicly that he does not believe these principles prohibit a network owner from setting up "tiers" and creating fast and slow lanes of service.²⁰ These principles do not say anything about how and whether a network owner must disclose to its subscribers that discriminatory terms of service have been established on the network. And nowhere in the policy statement does the word "nondiscrimination" appear. Nondiscrimination is the core of network neutrality. Without it, the provision is toothless.

We strongly recommend adopting the legislation put forward by Senators Snowe and Dorgan. The Internet Freedom Preservation Act not only prevents broadband network owners from blocking and impairing consumer access to content, services and applications on the Internet, but also appropriately prohibits preferential pricing for access tiers—a poorly disguised form of discrimination. Importantly, the bill also creates a meaningful enforcement mechanism to deter network discrimination. It would ensure that telephone and cable companies are not allowed to transform the Internet from an open, innovative, competitive environment to one in which they control what consumers can buy, see, and use on the Internet.

The choice before the Committee is clear: allow consumers through an unfettered online marketplace to decide which businesses succeed or fail; or allow the dominant telephone and cable duopoly to use its marketplace power to exclude the entrepreneurs who offer consumers affordable and innovative communications products and services. We urge you to adopt the former direction. The future of the Internet, the health of the communications marketplace, and the well-being of consumers depends on it.

ENDNOTES

¹Free Press is a national, nonpartisan organization with over 225,000 members working to increase informed public participation in crucial media and communications policy debates.

²Consumers Union is a nonprofit membership organization chartered in 1936 under the laws of the state of New York to provide consumers with information, education, and counsel about good, services, health, and personal finance, and to initiate and cooperate with individual and group efforts to maintain and enhance the quality of life for consumers. Consumers Union's income is solely derived from the sale of *Consumer Reports*, its other publications, and from noncommercial contributions, grants, and fees. In addition to reports on Consumers Union's own product testing, *Consumer Reports* with more than 5 million paid circulation, regularly, carries articles on health, product safety, marketplace economics and legislative, judicial, and regulatory actions which affect consumer welfare. Consumers Union's publications carry no advertising and receive no commercial support.

³The Consumer Federation of America is the Nation's largest consumer advocacy group, composed of over 280 State and local affiliates representing consumer, senior citizen, low-income, labor, farm, public power, and cooperative organizations, with more than 50 million individual members.

⁴Tim Berners-Lee "Neutrality of the Net," Decentralized Information Group, May 2, 2006.

⁵See Earl Comstock and John W. Butler, "Access Denied" in Mark Cooper (Ed.), *Open Architecture as Communications Policy* (Stanford: Center For Internet and Society, 2004).

⁶"Modification of Final Judgment," *United States of America v. Western Electric Company and American Telephone and Telegraph Company*, Civil Action No. 82-019, August 24, 1982.

⁷See: 47 U.S.C. § 202; For a legislative, legal, and regulatory history, see: Steven Aronowitz, "Brand X Internet Services vs. FCC: The Case of the Missing Policy Argument," *Berkeley Technology Law Journal*, Annual Review 2005; For a legal ruling consistent with nondiscrimination, see also: *AT&T v. City of Portland*, (9th Cir. 2000).

⁸*Brand X v. FCC* (9th Cir. 2003).

⁹"FCC Eliminates Mandated Sharing on Incumbents' Wireline Broadband Internet Access Services," Federal Communications Commission, August 5, 2005. See http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-260433A1.pdf.

¹⁰See for example: Expanding the Information Age for the 1990s: A Pragmatic Consumer Analysis (Consumer Federation of America and American Association of Retired Persons, January 11, 1990); Developing the Information Age in the 1990s: A Pragmatic Consumer View (Consumer Federation of America and Consumers Union, June 8, 1992); "Petition to Deny of Consumers Union, Consumer Federation of America, and Office of Communications, Inc. of the United Church of Christ," Federal Communications Commission, CS Docket No. 98-178, October 29, 1998; "Reply Comments of Center for Media Education, Office of Communications, Inc., United Church of Christ, Minority Media and Telecommunications Council, Civil Right Forum, and Consumer Federation of America, Federal Communications Commission, CC Docket No. 98-146, October 10, 1998.

¹¹See for example: "At SBC, It's All About 'Scale and Scope'," BusinessWeek Online, November 7, 2005; Jonathan Krim, "Executive Wants to Charge for Web Speed," *Washington Post*, December 1, 2005; Dionne Searcey and Amy Schatz, "Phone Companies Set Off a Battle Over Internet Fees," January 6, 2006.

¹²These technologies and their implications are discussed in Mark Cooper, "Open Access to the Broadband Internet: Technical And Economic Discrimination In Closed, Proprietary Networks," *University of Colorado Law Review*, Vol. 69, Fall 2000.

¹³Annual Reports of AT&T, Verizon, and Bell South.

¹⁴*AT&T Annual Report*, 2005, *SBC Annual Report*, various years.

¹⁵"Broadband: Bringing Home the Bits," Committee on Broadband Last Mile Technology, Computer Science and Telecommunications Board, Division on Engineering and Physical Sciences, National Research Council, National Academy Press, Washington, D.C.

¹⁶Trevor R. Roycroft, "Network Diversity—A Misguided Policy. A Response to Christopher S. Yoo's 'Promoting Broadband Through Network Diversity'" March 1 2006. Available at http://www.roycroftconsulting.org/response_to_Yoo.pdf.

¹⁷"High-Speed Services for Internet Access," Federal Communications Commission, Data from Form 477 Filings, April 2006.

¹⁸"Broadband Deployment Is Extensive throughout the United States, but it is Difficult to Assess the Extent of Deployment Gaps in Rural Areas," United States Government Accountability Office, Report to Congressional Committees, GAO-06-426, May 2006. See also, "Presentation by Kevin J. Martin at the 22nd Annual Institute on Telecommunications Policy & Regulation," December 3, 2004.

¹⁹"Appropriate Framework for Broadband Access to the Internet over Wireline Facilities," CC Docket No. 0233, Policy Statement, FCC 05-151, September 23, 2005.

²⁰See Patrick Barnard, "Whitacre, Martin, Don't See a Need for Net Neutrality Legislation," TMCNet, March 24, 2006.

Senator INOUE. Thank you very much.

I'd just note that there is a vote on at the present time. Senator Allen just came in.

Would you like to make your statement?

Senator ALLEN. If I could, yes. Yes, sir.

Senator INOUE. Please.

**STATEMENT OF HON. GEORGE ALLEN,
U.S. SENATOR FROM VIRGINIA**

Senator ALLEN. Thank you, Mr. Chairman—and thank all our witnesses—for this hearing on discussing Consumer Choice and the Broadband Deployment Act of 2006.

There's a clear need for telecommunications reform in this country, and we, for a variety of reasons, need to pass a bill. I believe that thoughtful telecommunications reform legislation will enhance and increase competition. Increased competition's great for the consumer and their choices, as well as new opportunities in voice and data and broadband and video.

The issue of net neutrality, though, has now come into this. This has become a central, major focus of debate on this very broad telecommunications reform measure. I'm concerned that this issue alone is going to bog this whole thing down, one way or the other, stopping all the other aspects of it.

I think—and you all have heard me say—I consider the Internet the greatest invention since the Gutenberg press for the dissemination of information and ideas. It is an individualized empowerment zone. It should remain so. We have kept the government out of the Internet. Other than DARPA helping create it, it has been free market and freedom and let individuals make decisions on it. And government involvement has been minimal. I've obviously tried to stop taxation of it, by State, Federal, or local governments. And so, this growth, this economic growth, the innovation and empowerment, must continue.

America is transitioning, though, from dialup to broadband. There is less competition, there is less choice now with broadband than there was with dialup service. So, there isn't—right now, you have—you get cable or DSL. The FCC indicated 94 percent of Americans purchase broadband from cable or from a telephone company, and—but, still, there are a good number of people who only have a choice of one; it's either DSL or it's cable modem or none at all. The lack of competition then brings up a question of policy, Mr. Chairman, for what we should do and whether any legislative steps at all ought to be taken to ensure the Internet remains open and the innovator that has affected us so profoundly. If it is—if it is determined that legislation is necessary, I think we need to take very, very close and great care to refrain from imposing overly burdensome regulations that stifle investment and innovation on the network.

Now, I think that the best solution is a competitive broadband-access market, and that competition will discipline the behavior of network operators, and prevent practices that would be harmful to the Internet and also consumers. I've—and I'm glad the Chairman incorporated it in a measure I introduced, the Wireless Innovation Act, that'll use this unused spectrum from analog to digital transition, and that will provide way more competition, way more opportunities for individuals to get broadband. And that's what we should want, and that will help preserve the Internet.

Now, I suggest this, Mr. Chairman, that we get all—and I was listening to Mr. Regan, whose views are kind of close to mine in

the way that you are looking at this. I actually agree with all of you all in a variety of ways, but you're kind of like an impartial—you're more of a referee, you've got a striped tie on there. He's not like a zebra, but you're more like a referee in this whole matter. And you're asking these three very probative questions.

I would suggest, Mr. Chairman, you get all these relevant stakeholders together in a room, lock them in that room, and find if they can get a consensus on how we can protect the Internet while, at the same time, making sure there is a fertile investment climate for network operators. I don't want to stifle the buildout. And if that—but I see—unless you all can come together and make sure that all the relevant stakeholders can be in agreement with it, I'm really concerned about the unintended consequences of hasty government action, worrying about a perceived problem that has not yet occurred, and then doing something that ends up being untoward. On the other hand, I understand that, "Well, you can't wait, the genie won't be let back out of the bottle again," and so forth.

But I thank you, Mr. Chairman, for holding this hearing. And I really do encourage all of you, all of y'all and others, to get together in a room, figure this out. Because I think if you get government action, it probably will end up being more harmful than good. Inaction may not be the worst thing in the world, but I also look at the legislative reality that if we do not address this network—or this net neutrality issue, there are so many other great provisions of this bill that are going to be held up, and that is ultimately, the bottom line, the worst thing for this country.

And I thank you, Mr. Chairman, for allowing me to share these views out of order.

Thank you.

Senator INOUE. Thank you very much.

At the direction of the Chair, we will be standing in recess for 15 minutes. But, before we do, the Chair will recognize Senator DeMint.

**STATEMENT OF HON. JIM DEMINT,
U.S. SENATOR FROM SOUTH CAROLINA**

Senator DEMINT. Thank you, Senator.

I would just ask unanimous consent—

Senator INOUE. Will you hold? May I suggest that the other members go to vote?

Senator DEMINT. I want to hear from the witnesses, but just a couple of quick comments.

As a person who has been in business most of his life and not in the Senate, or in politics—I've worked with a lot of different products and distribution centers, and there are a lot of parallels here that we need to recognize. A lot of my years were spent trying to get products and distribution in grocery stores so those grocery stores could sell them to millions of consumers. And we have that type of dynamic competition now that exists in telecommunications and on the Internet. And I think what we're talking about doing today is telling Kroger or Safeway how they need to manage their shelves and what products they need to put on their shelves, and to mandate by government that every product that is presented have a place on the shelf in an equal way.

That's not good for consumers, because, as someone who sold products for years, we had to make a good case that we were going to develop a consumer market with consumer demand. We were going to spend the money on advertising. We were going to spend the money on developing the best product we could so that if that grocery store did not have our product, it was their loss, not just ours.

What we're talking about is telling Whole Foods, who's spending millions of dollars developing new stores across the country, that they have to take all the different kinds of products. They no longer control their shelves. And what would happen with them, as well as with the Internet, if we come in and try to regulate their business and tell them what products, what content, as we call it in this industry, that they have to have, and how they have to display it, or put it on their shelves, or in their pipes, we're going to make a huge mistake, because this government cannot possibly keep up with the dynamic and growing market that we have in the Internet. It's one of the things that's working well in this country today, and it's working well because the government has yet to get its hands on it. Let's wait until we have a problem before we try to anticipate those problems and regulate for them.

Thank you, Mr. Chairman. I yield back. And I'll be glad to listen while you go vote, if you haven't voted.

Senator INOUE. No, we'd like to listen to them, too.

Senator DEMINT. OK, good.

Senator INOUE. So, if I may, I'll call a recess for the next 15 minutes, and, at that time, the Chair will recognize Mr. Cochetti.

[Recess.]

Senator MCCAIN. [presiding] We'll reconvene the hearing. Tell you what we'll do—because Senator Inouye wants to make sure he hears the testimony of the last two witnesses, I'll begin with some questions, and then others will be filtering back. And when Senator Inouye comes back, then we will hear testimony from the last two witnesses, showing the incredible flexibility of the Commerce Committee.

[Laughter.]

Senator MCCAIN. Mr. Misener—and we'll just go down the panel—Mr. Misener, on May 11 the *Wall Street Journal* publicized an—published an op-ed—by Leo Hindery, who is a former cable company executive—which states, and I quote, “Operators of all stripes should be allowed to charge consumers different prices for different—for Internet access. Differentiated Internet access is just another form of consumer choice, and an extremely positive one at that, but discriminating against selected Internet content flies in the face of the choice. Parsing the net neutrality debate in this manner would let broadband companies earn appropriate returns on their significant investments in distribution plant, while giving consumers, without gatekeepers in the middle, all the benefits of the abundant content of the Internet.”

Do you agree or disagree with Mr. Hindery's statement on parsing the definition of net neutrality? And is there any agreement at the table on whether there are any aspects of net neutrality that could, and should, be enacted into law?

Mr. Misener? And we'll just go down the list of witnesses.

Mr. MISENER. Yes, Senator McCain—

Senator MCCAIN. One, do you agree or disagree with Mr. Hindery?

Mr. MISENER. Agree.

Senator MCCAIN. Second, is there any aspect of this issue that could, and should, be enacted into law?

Mr. MISENER. Agree with Mr. Hindery. Certainly companies like my own already are paying that kind of tiered approach for access. We use more capacity in our connection to the Internet than a small online shopping site, and, thus, we pay more for it. It makes perfect sense that a gamer using the Internet 24/7 should pay more than someone who sends e-mails twice a month. We support that.

The point that we ought to all agree on is that the content that the—the network operators, with market power over the networks, should not be able to extend that market power to control of content in a way that discriminates among the sources or ownership of content.

Senator MCCAIN. Mr. Tauke? And, by the way, do you believe there are any aspects—did you answer whether there should be—anything should be acted into law, Mr. Misener?

Mr. MISENER. Yes, sir. We fully support the legislation introduced by Senator Snowe and Senator Dorgan. And so, we think that's a great approach.

Senator MCCAIN. Mr. Tauke?

Mr. TAUKE. Senator, first, I personally agree with Mr. Hindery, in the sense that consumers have much—many different choices for access. From our company alone they can purchase dialup, you know, DSL, they can purchase fiber capacity at 5, 15, or 30 megabits per second. And, of course, there are different pricing structures. So, there are more and more options coming to—being made available to consumers from individual companies. But then, we have many more players also entering the access marketplace.

When it comes to the content side of the house, I want to differentiate between Internet access and access, generally. Our view is that there should be—that consumers should have access to any website they want to get to with the capacity that they purchase for that access. And we don't think there should be any blocking, degrading, or any other attempt to in any way interfere with the consumer's access to any website.

But we also—as we build the new network with much more capacity and different lasers doing different things, we'd also like to have the ability to be able to enter into a health-monitoring arrangement with Johns Hopkins so that they are able to monitor their heart-care patients. We would like to be able to enter into an arrangement, let's say, with a credit card company, or bank, or financial institution that wants to provide special services, where they want one network provider to have end-to-end connectivity and managing authority over that network, so they can provide special financial services online to their customers. We don't know exactly what will happen, but we think that there is a whole new space for innovation as you build these networks with huge amounts of capacity, and we'd like to do that.

In answer to your last question, as to what we do with the—with legislation, our view is that legislation is—on net neutrality is not

now needed because of the steps the FCC has taken to ensure open Internet access for consumers. But if there were, if the Committee decided it wanted to do legislation, we think there are specific things, like in the no-blocking/no-degrading area, where there is potentially room for a belt and suspenders, if you will, from Congress, to essentially go down the path the FCC has already taken.

Senator MCCAIN. But certainly not laws that would mandate certain access to the Internet.

Mr. TAUKE. I think what I'm more concerned about, Senator, is access, generally. We have—in the network we're providing, we have one path that goes video, we have one path that goes Internet access, we have another path that will have virtual private networks, and there are more paths that can be created with new lasers on this fiber. There is one thing talking about access to the Internet, it's another thing talking about access, generally. We don't think there's a problem with access to the Internet. There shouldn't be any blocking. If Congress wants to ensure that doesn't happen, we'd be delighted to work with you on that, but don't—

Senator MCCAIN. Mr. Regan?

Mr. TAUKE.—prohibit us from doing other things on that same access network.

Senator MCCAIN. I gotcha.

Mr. Regan?

Mr. REGAN. I agree with Mr. Hindery, number one. And, number two, I would prefer that you not legislate in this space until we understand exactly what it is we're trying to do and exactly the nature of the problem. But if you're compelled to do it, then I would urge you to do something along the lines of what the FCC has done, and that is a consumer protection provision that basically says, "You get what you pay for, and we guarantee that," number one. Number two, "You can go on the Internet where you want to go, as long as it's lawful." Number three, "You can run any applications you want, as long as you don't hurt anybody else or hurt the network." And, number four, "You can connect any device you want to the network, as long as you don't hurt anybody or the network itself."

So, I'd keep it focused on the consumer, and I would be very worried about introducing these notions of nondiscrimination, because I think they bring you down a path that is very ill-defined.

Senator MCCAIN. Well, Mr. Regan, what signs would you say that you could see that may say, "OK, we need to pass some kind of legislation to ensure net neutrality"?

Mr. REGAN. I think if we find—

Senator MCCAIN. What signs would trouble you?

Mr. REGAN. OK. I think if we—first of all, we think that these—as problems arise, they ought to be brought to the FCC for resolution, because they've said that they can do it. They've said they have the authority to do it. It says right here, "We can make sure that the network is operated in a neutral manner."

Senator MCCAIN. Yes, but what signs would bother you?

Mr. REGAN. What would bother me is if someone is actually blocked, if someone is denied access to content, if someone is told, you know, "If you get on the Internet, and you have a home office, and you're trying to put a lot of data on the Internet within your

service plan, and you're being blocked, because you're using so much bandwidth," those kinds of things would trouble me. And then I would say there's a need to step in. But I think we ought to exhaust the FCC authority first.

Senator MCCAIN. Mr. Scott?

Mr. SCOTT. To start, I think, you know, the bottom line for consumers is that any functionality made available on the network now, and henceforth, should be made available on a nondiscriminatory basis. That is to say, the consumer should be in charge of selecting the providers of the content and services that they desire. What we are concerned about is a situation where functionality is made available on the network and access to that functionality is determined exclusively by the network operator.

We believe, second, that—

Senator MCCAIN. Do you see any signs that that may happen?

Mr. SCOTT. I read it, the executives of all of the network owners in the *Wall Street Journal* and the *Washington Post* and in *Business Week* telling us that that's exactly what they plan to do. So, I take them at their word.

I think—you know, I disagree with Mr. Regan, in that I think nondiscrimination is actually a very well-defined term. We have had nondiscrimination in the Communications Act for many, many years. Nondiscrimination has been applied to the telephone network for decades. We've had nondiscrimination in the program access rules in cable for many years. This is an issue that Congress knows well, the FCC knows well, and the consumers have benefited from for decades. We'd like to see it continue.

Senator MCCAIN. Legislation?

Mr. SCOTT. We strongly support the legislation put forward by Senators Snowe and Dorgan.

Senator MCCAIN. Mr. Cochetti?

Mr. COCHETTI. Thank you, Mr. Chairman. As my testimony will explain a little later, our perspective is that of a computer industry trade association that is made up primarily of small computer companies; about 20,000 small computer companies around the country. That gives us a slightly different perspective than some of the other witnesses at this hearing.

The main comment I'd offer with regard to the *Wall Street Journal* article is that our members are primarily concerned about the adverse impact of government regulation. They are concerned that premature government regulation could stifle investment and stifle the flexibility that they need for their use of, and their customers' use of, the Internet. Regulation should enter the equation if, and when, problems arise that cannot be addressed, and have not been addressed, by the market, end-user education, technology tools, and other approaches. So, I think that the general conclusion we would reach would be a little bit different than that presented in the *Wall Street Journal* article; namely, that we don't believe that the conditions are ripe for government regulation.

As to your second question, about legislation today, our response would really rely pretty much on the same framework. The question is one of whether the conditions are evident and ripe for government regulation of Internet access services.

Senator MCCAIN. Are the conditions evident, in your view?

Mr. COCHETTI. We don't believe that the conditions have arisen that would justify government regulation, or wholesale government regulation, at this time. And, you know, I think that the issue—

Senator MCCAIN. Are you worried there might be?

Mr. COCHETTI. I think it's a matter that we are concerned with, obviously, and one that anybody who's concerned about the Internet should pay attention to. But the Internet is a lively and dynamic medium that has managed to work its way around many issues without the help of government, so we are firmly one of those who believes that government regulation should not be the first resort when facing a problem, or an issue on the Internet.

Senator MCCAIN. You say you have a slightly different perspective. One of the things that I keep hearing is, "Well, if we wait, and some of these things happen, it would be very difficult for Congress to act to repeal activities that are taking place that would harm," quote, "net neutrality." Does that concern you?

Mr. COCHETTI. Mr. Chairman, it does—it is an issue of concern, obviously. It's not evident to us that the government could not take corrective action if the situation proved adverse after it became evident that market forces, technology tools, and end-user education couldn't adequately address the problem.

Senator MCCAIN. Mr. Comstock?

Mr. COMSTOCK. Thank you, Mr. Chairman.

I think it's actually quite interesting that Mr. Hindery, a cable operator, would make that analysis. And I think it's a very accurate one. He's dividing the difference between—

Senator MCCAIN. He's a former—

Mr. COMSTOCK. Cable—

Senator MCCAIN.—cable operator.

Mr. COMSTOCK.—former cable operator, yes, which means he knows well the circumstance of which he speaks, because everybody keeps talking as if we've never seen this before. In fact, we have 10 years of experience with the cable industry about this. And it's not true, as Mr. Tauke said, that you can get any ISP you want. Sure, you can reach any ISP over a cable network, but you have to buy their ISP as part of the package when you sign up, just as you have to buy Verizon's ISP when you sign up for video. So—

Senator MCCAIN. Sort of like—

Mr. COMSTOCK.—he's—

Senator MCCAIN.—sort of like I have to buy a package of programs for when I—from my cable company when I subscribe to them—sort of like along those lines—rather than the ones that I want, pretty much, right?

Mr. COMSTOCK. That's exactly right.

Senator MCCAIN. Good. Oh, thank you.

[Laughter.]

Mr. COMSTOCK. The—I think the point to make—and maybe this will help illustrate it—we are really talking about a distinction between transmission and content. And it is transmission that has always been regulated, and that's what made the Internet possible. The development of packet-switched networking would not have occurred if we didn't have those nondiscrimination rules. Why? Be-

cause the companies that brought you packet-switching were not the incumbents; it was the other folks.

And I think the example that might help identify this is—Mr. Tauke talked about his three lasers-to-the-home—well, think about your local exchange network. You could buy a second phone line if you wanted, and do with it what you wanted. What he's essentially suggesting is, "Gee, there may be four phone lines running into your house, and we'll sell you one of them to do with what you want, but the others we get to decide who will use those, what services will be offered. Even if you want to buy that capacity, it's not available to you." So, he keeps talking about, "Gee, there will be these other business arrangements that somehow don't adversely impact the consumer." What if I want to go to one of those other providers, or somebody who's not in a special deal, and I want to buy that capacity to do it, buy the second phone line for my fax machine? They're going to say no. Why? Because that protects the value of their content and services, vis-à-vis the people they're trying to compete with.

So, Mr. Hindery's absolutely right, you need to separate transmission from content and prevent a monopoly in transmission, which any network operator has with respect to the homes and businesses they serve, from being used to leverage an advantage in content and services. So—

Senator MCCAIN. I think I know your—

Mr. COMSTOCK.—we do need—

Senator MCCAIN.—answer.

Mr. COMSTOCK.—answer.

Senator MCCAIN. Mr. Tauke, you have 30-second rebuttal time, since your name was mentioned frequently.

Mr. TAUKE. Thank you, Senator.

Senator MCCAIN. Welcome back, Mr. Comstock.

Mr. TAUKE. The notion that we have an interest in restricting content on the network is just laughable, from our business perspective. We want Google, and Microsoft, and eBay, and every other provider of content to do as much selling as they can to consumers, and to get consumers to use our network to get to those providers. When we talk about special arrangements, these are special arrangements with people—which people don't want to deliver over the Internet. We've been doing this in the business market for 20 years. We have a lot of people who do business over the Internet—

Senator MCCAIN. You're nearing the end of your 30 seconds.

[Laughter.]

Mr. TAUKE. OK. I'll stop.

Senator MCCAIN. All right. Thank you very much.

Not astonishingly, the vote was three to three—

[Laughter.]

Senator MCCAIN.—on legislation. I thank the witnesses. This is extremely helpful. It's a very difficult issue, one that I think has aroused as much interest as any issue recently before this committee, and I thank the witnesses who are here today.

Senator DORGAN?

Senator DORGAN. Mr. Chairman, thank you very much.

And let me thank all of the witnesses. These witnesses have offered some very interesting and provocative testimony.

I have to say that Senator Allen, when he was here, talked about—as we all have—talked about freedom, and then suggested we lock all of you in a room.

[Laughter.]

Senator DORGAN. I was thinking, there's a counterpoint there somewhere.

Let me ask—Mr. Tauke, a Senior VP/General Counsel from your company says—and I'm going to do this, because this is what got me interested in this issue—"Google is providing a free lunch that should, by any rational account, be the lunch of the facilities providers—or Google is enjoying a free lunch, rather, that should, by any rational account, be the lunch of facilities providers."

Just prior to that, AT&T now—CEO Whitacre says, "They don't have any fiber out there. They don't have any wires. They don't have anything. They use my wires for free, and that's bull. For a Google, or a Yahoo!, or a Vonage, or anybody to expect to use these pipes for free is nuts."

Can you understand, when I read this, I say, "Uh-oh, somebody's got a gate, somebody's going to have a toll, and somebody's going to figure out what's going to come into my home and how much they're going to charge for it?" I pay to have Google come into my home. I pay, as I said, the equivalent of a small used car every month for cable to provide broadband to my home. So, that toll is already paid. Why is it that the provider here is saying they're getting a free ride, and the implication is that you and AT&T want to charge them?

Mr. TAUKE. Senator, yes, I can understand why you would be concerned, and let me try to explain the different contexts in which people think about these things.

If you are in, frankly, the "old world," where there is limited capacity—you had copper wires, and so, therefore, there is a real premium on space—then you have one kind of regulatory structure, which we still have for dialup service, which is the nondiscriminatory common-carrier structure, but, as you move into a "new world," where you have fiber with virtually unlimited capacity, and you are talking about doing things beyond Internet access, then I think that's something different.

Senator DORGAN. But—

Mr. TAUKE. So, we want to sell people 30 megabits or 50 megabits of Internet access, where they—which they can use however they please, going to whatever website they want, but—

Senator DORGAN. Let me—don't eat up my 5 minutes, there—

Mr. TAUKE. Right.

Senator DORGAN.—Mr. Tauke. I just asked you a short question. Is there reason for me to be concerned when I read these sort of things? The answer is yes. I think you started with that answer. But—

Mr. TAUKE. But not—no, not if you understand that in the new network the consumer will have full and robust access to the Internet, but there should be an ability to also offer them other services.

Senator DORGAN. Mr. Misener—thank you, Mr. Tauke—Mr. Misener, you indicated that the proposal that we have offered in

a piece of legislation is not, in fact, new regulation at all, it simply reinstates the nondiscriminatory provisions that had already existed. Can you amplify on that?

Mr. MISENER. That's correct. It's one of the major myths in this whole debate, Senator Dorgan, that the Internet has been unregulated. And that's not correct. Internet access has been regulated under these nondiscriminatory rules since its inception, until last year. So, we see this as a reinstatement of the longstanding consumer protections that were dismantled by the FCC last year.

Senator DORGAN. I don't view this, Mr. Chairman, as a contest between good guys and bad guys. I mean, that's not what this is. But these are big interests with very significant investments, significant risks, and they want to shape the future in their image, to the extent they possibly can. That's the purpose of being in business, wanting to do well.

My interest is in having an open Internet, and what I call "Internet freedom." The open architecture of the Internet is the dynamic that I think has allowed us to have breathtaking changes in our lives. I can access the biggest library in the world, the greatest museums in the world, sitting at home, on a keyboard. And that's the purpose of all of this, to make sure the Internet remains open and free.

Mr. Scott, your organization has accumulated a pretty impressive group of interested parties and organizations. Tell me what your intention is with those groups.

Mr. SCOTT. Well, our intention is to keep them up to speed as to the decisionmaking progress here in the Congress, keep them informed about what the issues mean to them—as consumers, and as small business providers, and as organizations who have millions of members across the Nation—how the future of the Internet will affect them.

Senator DORGAN. And what are the consequences if the Congress says, "You know what? Let's do nothing, and whatever happens, happens out there?" What are the—

Mr. SCOTT. Well—

Senator DORGAN.—consequences for all those interests?

Mr. SCOTT. I think they'll be universally negative, and I think that the hundreds of thousands of people that are currently engaged will become tens of millions, and we'll suddenly see a revolt on the Internet, the likes of which has never occurred before.

Senator DORGAN. Mr. Chairman, my time is up, but I—and it's really too short a time, but this panel is really an extraordinarily good panel. I shut you off, Mr. Tauke, and yet your testimony was good testimony. And I think we have to think this through carefully. No one—Senator Snowe, myself, Senator Inouye—none of us want to do something that's precipitous, that's going to cause problems that are unintended consequences, that injure the Internet. That's not my interest at all. My interest is to make sure we have a dynamic Internet that works the way it has always worked, that accommodates innovation, creativity, and has free and open architecture for the future. So, you know, our committee is going to work through this, and I hope—and we'll do it in a bipartisan way and a thoughtful way. And I think the contribution you all have

made today is a good contribution. But I think much more information is needed, Mr. Chairman.

Senator MCCAIN. Thank you very much, Senator Dorgan.

And, in the spirit of nondiscrimination, we will allow Mr. Cochetti, and then Mr. Comstock to make their opening statements.

Please proceed, Mr. Cochetti.

**STATEMENT OF ROGER J. COCHETTI, GROUP DIRECTOR FOR
U.S. PUBLIC POLICY, COMPUTING TECHNOLOGY INDUSTRY
ASSOCIATION (CompTIA)**

Mr. COCHETTI. Thank you, Mr. Chairman and members of the Committee.

My name is Roger Cochetti, and I'm here today on behalf of the Computing Technology Industry Association, CompTIA. Having spent much of my own career in both the telecommunications and computer industries, I have some perspective on the importance of the issues before the Committee today.

CompTIA is the largest computer industry trade association in the United States. While our 20,000 members include most of the largest computer hardware, software, and service vendors in the industry, we are perhaps best known for the many thousands of so-called value-added resellers, or VARs, who make up 75 percent of our membership. These typically small computer companies are the backbone of America's information economy. VARs are the principal source of computer support for America's small businesses. An average VAR might have six employees and manage the computer systems for 100 small businesses. VARs are, in this respect, the IT departments of America's small businesses; and, as such, they, and we, in CompTIA, have a very strong interest in communications policy reform.

As this committee well knows, the technologies that enable telecommunications, computing, broadcasting, and cable television are rapidly converging. At the heart of this convergence lie the broadband services that enable our members, and their small-business customers, to do everything from web-surfing for price quotations to instant video conferences with business partners. Broadband is an inherent part of the services that our members offer to their small-business customers today.

Mr. Chairman, I'd like to comment on three broadband-related issues addressed in this bill. Our perspective on all three is very much tempered by the fact that small-business use of information technology today looks very different than it did when the Congress last updated the Telecom Act. Much has changed in the technology and the marketplace, and the rate of change is now accelerating. Three issues stand out for us.

First, S. 2686 includes what we think are important provisions to carefully increase the amount of desirable radio spectrum for wireless services. The bill would enable spectrum that is now used as white space separating broadcast bands to be used for new wireless services. These new services will include many that will be used by small businesses to improve their productivity, not least of which will be new wireless-broadband services. We support this provision. It will help spur new wireless-broadband services and

extend wireless broadband services to areas that may not be fully served today.

Second, while we have seen gains in the availability of broadband to small businesses since 1996, much more needs to be done. We need more suppliers, more competition, and wider reach for broadband services. This will, in turn, drive innovation and investment in small business.

When we took an informal poll of our VAR members earlier this year, 67 percent of those VARs participating indicated that they had only one choice for broadband, and 78 percent said they wanted more competition in broadband.

This bill would significantly help increase the supply of broadband by very carefully creating new procedures for video franchising, which is intimately linked to broadband. This new procedure would address one of the major barriers to an increase in the supply of broadband services, the patchwork of local franchise procedures that has grown up for cable television. We support this reform and are convinced that its enactment will significantly enhance the availability and the competitiveness of broadband services to our members and their small-business customers.

Third, since the inception of the Internet, Internet access and content services have generally not been federally regulated. This hands-off approach to the Internet has been important to our members and to small-business use of, and investment in, the Internet. And this approach has been a major contributor to the success of the Internet.

Government regulation is particularly ill-suited to a medium like the Internet, which is extremely dynamic; whereas, government regulations normally take quite a while to formulate and revise. Moreover, since the United States has been the principal advocate around the world against government interference with the Internet, any regulation of the Internet by the United States will be used to justify more extensive, and often misguided, regulations by other governments.

For these reasons, our members have felt that government regulation should be the last resort in any effort to address problems that have arisen in the Internet. Marketplace competition, technology tools, end-user education, and industry best practices are far more likely to be effective. And if they fail, then government regulation should be actively considered.

For these reasons, Mr. Chairman, we believe that wholesale Federal regulation of Internet access services is not justified at this time.

In sum, Mr. Chairman, we believe that new spectrum for wireless services, a new Federal procedure for broadband, and government restraint in regulating Internet access will contribute to major improvements in broadband for our members and for the small businesses whom they support.

I'd be happy to answer any questions you may have.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Cochetti follows:]

PREPARED STATEMENT OF ROGER J. COCHETTI, GROUP DIRECTOR FOR U.S. PUBLIC POLICY, COMPUTING TECHNOLOGY INDUSTRY ASSOCIATION (COMPTIA)

Good morning, Chairman Stevens, Ranking Member Inouye, and distinguished members of the Committee. My name is Roger Cochetti. I am Group Director for U.S. Public Policy of the Computing Technology Industry Association (CompTIA), and I am here today on behalf of our 20,000 member companies.

Mr. Chairman and Ranking Member, I want to thank you and the members of your committee for holding this important hearing on S. 2686, the "Communications, Consumer's Choice, and Broadband Deployment Act of 2006." We believe that this bill, as well as other efforts in the U.S. Senate and House, represents a good starting point in the legislative discussion surrounding the update of our Nation's communications laws.

It has been roughly ten years since the last comprehensive overhaul of these laws. Clearly, technology, as exemplified in the explosive growth of the Internet, has pushed the current law to its edges. Thus, the Congress now faces a unique opportunity to simultaneously strengthen America's information infrastructure and stimulate our economy, both of which will make the United States more globally competitive.

Mr. Chairman and Ranking Member, the Computing Technology Industry Association is the largest computer industry trade association in the United States. We represent the business interests of virtually every segment of the information technology (IT) industry. For 24 years, CompTIA has been well known for the services that it provides to the IT industry. These include research, non-technical industry standards, educational materials and programs, networking and partnering opportunities and, perhaps most notably, skills certifications for professionals in the computer industry. Roughly 20,000 mostly American businesses are members of CompTIA and each month over 10,000 people around the world take one of our exams in order to earn one of our dozen CompTIA professional certifications.

And while we represent nearly every major IT hardware, software or services company, Mr. Chairman, we distinctly represent the Nation's tens of thousands of so-called value-added resellers, or VARs. In fact, about 75 percent of our membership is comprised of VARs. These small system integrators—typically having about six employees per establishment—set up and maintain computer systems and networks for America's small businesses. An estimated 32,000 American VARs computer-enable small business today, selling some \$43 billion worth of computer hardware, software, and services; mostly to America's small businesses. This means that over one-third of the computer hardware sold in the U.S. today is sold by VARs, again mostly to small businesses.

VARs are the IT departments of small businesses and without them, small businesses in the United States today could not function. Your dentist, travel agent, local retailer, or dry cleaner typically contracts with their local VAR to install, maintain and service their IT needs. For example, the local area network in your dentist's office was almost certainly not installed, nor is it maintained by the dentist him or herself; nor was it installed or maintained by a large vendor company. It was almost certainly designed, installed, and is maintained by one of our Nation's VARs. This is true for virtually all small businesses in the United States.

In addition to representing the interests of the small IT companies, called VARs, through our public policy offices in Washington, Brussels, Hong Kong, and Sao Paulo, CompTIA works to provide global policy leadership for the IT industry, addressing a wide range of issues, including e-Skills capacity-building, the promotion of R&D, protecting intellectual property, and many others.

Communications policies and regulations are of central importance to our members, Mr. Chairman, particularly as the technologies of telecommunications and information processing converge between themselves and with other technologies. IT today is viewed by our member companies, and more importantly by their customers, as a seamless stream of services and products that cover what may in the past have been labeled telecommunications, computation, broadcasting and other activities. Consequently, as this committee considers changes in the Nation's communications laws and regulations, it is important to bear in mind that any such changes will have an enormous effect on the IT industry in general and on the small IT businesses who are the IT departments of the Nation's small businesses.

Communications, Consumer's Choice, and Broadband Deployment Act of 2006

With the passage of a decade since the enactment of the Nation's last major telecommunications laws, much has changed—in the marketplace, in the technology environment and in the convergence of once separate industries and markets. A dec-

ade ago, the Internet—and all of the rich content and access facilities that have led almost 80 percent of all Americans to describe themselves as Internet users—was in its infancy; wireless services were in their toddler years; digital video services were in their childhood; and broadband services for small businesses were not even born. When the Telecommunications Act of 1996 (1996 Act) was passed, American small businesses stood at the precipice of the digital communications revolution. By deregulating the local telephone monopoly, fostering facilities-based competition, and setting up the present competitive dynamic between local cable and telephone companies, among other things, the 1996 Act set in motion market forces that would change our lives, and the lives of American small businesses, forever. In short, as IT became more deeply embedded into the daily work of small business, the proliferation of networked broadband technologies opened up new opportunities never previously imagined.

Consequently, S. 2686 is a truly sweeping piece of legislation, reflecting important efforts to update the laws governing America's communications landscape. While it seeks to reform and/or address such critically important matters as the Universal Service Fund, cable program access and "broadcast flags," to name but a few issues, for our primarily VAR membership, three core areas of S. 2686 hold particular interest: The availability of radio spectrum for new data services in general, and the allocation of so-called "white space" broadcast spectrum for new wireless services in particular; streamlined and national franchising procedures for broadband services; and the regulation by the government of the terms and rates for Internet access.

Unlicensed "White Space" Spectrum

The use of radio spectrum for data services is an absolutely essential part of our industry today, Mr. Chairman. While wireless networks were considered rare and exotic in 1996, today they are a common element in the networks used by small businesses. And while local area wireless networks, often called WiFi, are standard for many small businesses today, wide-area broadband networks are clearly the next major element of the American small business IT environment. This growth—and the growth driven by the introduction of many other new wireless applications—requires additional spectrum at the low frequencies whose propagation characteristics permit signals to penetrate structures.

Earlier this year, the Congress acted decisively to ensure that spectrum that could be used for wireless services was freed up from broadcast television in connection with the transition from analog to digital television broadcasting. Section 602 of S. 2686 would build on that step forward by mandating that the FCC carefully proceed to ensure that other unutilized or under-utilized spectrum that is currently licensed for television broadcasting—the so-called "white spaces" that lie between broadcast television channels—be freed up for unlicensed wireless services. The careful allocation of this spectrum for unlicensed wireless services will help introduce new competition in the provision of broadband services to small businesses and consumers alike.

In addition, Mr. Chairman, we believe that the opening up of spectrum from these "white spaces" to new wireless applications offers an opportunity for new broadband services in areas that may not be fully served by other services today. This is of particular importance to VARs and small businesses in rural areas.

The allocation of "white space" spectrum for new wireless services will both contribute to the competitive mix of broadband services in areas already served by other broadband technologies and help extend broadband services to new areas that may not be fully served today. Underscoring the benefits of broadband technologies for small businesses, the U.S. Small Business Administration recently noted:

"Broadband investment (and more generally investment in information technology) appears to provide substantial benefits to both consumers and the overall economy. . . . [Broadband] services permit faster downloading and uploading of bandwidth-rich applications, video, music, pictures and data. As producers and consumers of these services and applications, small businesses stand to benefit from broadband deployment and use."

According to the SBA, 48 percent of American small businesses use some type of broadband service to conduct business. Of this, 26 percent use cable-provided broadband; 21 percent use DSL; 4 percent use high-speed satellite; 4 percent use T-1; and 3 percent use wireless broadband. Our members believe that the percentage of small businesses that use broadband should and will increase as new wireless and wireline broadband services become available.

"White space" frequencies represent prime, largely unused wireless "real estate." With their excellent signal propagation characteristics, low-cost broadband deployment using this spectrum should be readily achieved, jumpstarting significant new

business opportunities and improvements in the productivity and competitiveness of small businesses, urban and rural. Such wireless broadband services will enable small businesses to more easily and cost-effectively employ and network IT, especially in sparsely populated, underserved areas where the economics of broadband deployment sometimes make it impractical for providers to serve. In doing so, “white space” technology will give America’s small businesses a better foot-up in the globally-competitive economy.

Currently, unlicensed devices may not operate in the “white spaces” between broadcast bands. Section 602 of S. 2686 seeks to change this, calling on the FCC to very carefully “certify” devices that do not interfere with working TV stations. This will open the spigot of research and development, ultimately creating a whole new market for wireless products and services, including many that are related to broadband.

We believe that a U.S. spectrum policy that recognizes the enormous importance of wireless services to the IT and the small business sectors, efficiently allocates spectrum, protects against interference to licensed services, and provides market flexibility will promote innovation and competition. In so doing, such a policy will contribute to American productivity, and to our global competitiveness. For small businesses—who on average spend about \$545 per month for all communications services, a disproportionate amount compared to a large business—S. 2686 would work to provide more competitive broadband options for them. As such, we applaud this part of the bill.

Video Franchising

Mr. Chairman, 35 million of the approximately 40 million high-speed lines in America serve residences and small businesses. Converged services (i.e., data-video-voice, VoIP, video conferencing, data transfers, etc.) drive much of this growth, making small businesses more productive, efficient, and competitive. Cable-provided broadband and telco-provided DSL represent the two leading choices to enable converged services. To illustrate the prevalence of these two choices, of the 48 percent of all U.S. small businesses that use broadband, according to the Small Business Administration, nearly 47 percent used either cable-provided high-speed services or DSL, with cable services being the clear leader.

It is no accident that these two choices command the market. Cable and telephone companies represent substantial—presently available—facilities-based offerings. In a very large number of local areas in America, there exists a cable and a telephone company, with at least one of them offering broadband/high-speed services. In fact, although the FCC concludes that low population density has an “inverse association” with high-speed service availability, even in U.S. locales with densities lower than six persons per square mile, 92 percent of the populace in those zip codes can be served by high-speed services.

No doubt, other “intermodal” (i.e., wireline, wireless, satellite, and broadband-over-power-line) forms of broadband or high-speed services exist or are planned, but S. 2686 exploits a proven model—i.e., the competitive zeal between cable and telephone providers—to ignite present and future broadband deployment. (Parenthetically, this may be one of the most successful aspects of the 1996 Act. Congress egged-on the dynamic tension between the two largest communications providers in most American markets and explicitly abstained from the regulation of information services, which fueled the growth of cable and telco-provided high-speed services.)

To further encourage competition between the two major modes of communications competition, and encourage the wider roll-out of broadband services, Title III of the bill would grant an expedited national entry procedure for network operators who want to offer converged broadband services to small businesses and consumers alike. To accomplish this, S. 2686 seeks to limit some of the restraints on the growth of broadband that were previously imposed by local franchising authorities, while at the same time ensuring that local franchise authorities continue to receive comparable revenues and public access channels.

Our members want more broadband competition, and more broadband choices for use with their customers. In an informal 2006 survey of CompTIA member VARs about the provision of broadband services to their small business customers, 67 percent of our members noted they had no competitive choice for broadband offerings in their locality. Seventy-eight percent of the participating VARs believed that telephone companies should be allowed to offer cable-like broadband services to compete with the local cable provider. And similarly, 78 percent would pay more for faster services from their broadband provider.

While this survey is not scientifically representative, it clearly confirms what our members have been telling us: competition in converged broadband services needs a nudge. We believe that S. 2686 works to reduce one of the main obstacles to that

deployment—the multiple and sometimes arbitrary rules of local franchising authorities, which have heretofore limited competition to the detriment of American VARs and their small business customers.

Mr. Chairman, similar proposals exist in counterpart House legislation, which we also encourage. National franchising of broadband services, with safeguards for local franchise authorities and for consumers, will enhance broadband competition and in so doing significantly benefit America's small IT businesses, the VARs, and their customers, America's small businesses. The result will be further improvements in productivity and American competitiveness.

Government Regulation of Internet Access Services

Much has been said on the topic of so-called “net neutrality,” yet few practical details have surfaced. What we can gather from the debate is that net neutrality resembles the four principles issued in 2005 by the Federal Communications Commission, which would work to “ensure access” to incumbent broadband facilities by competitors for the provision of their Internet content, run applications, and connection devices. Still, details are sparse.

S. 2686 seeks to fill this void, urging the FCC to study net neutrality for the next five years, and then prescribe answers should it find that something is “broken.” Importantly, the bill eschews the immediate regulation of Internet access services that have been advocated by some.

Throughout a variety of debates in this committee and in chambers around the world, the issue of government regulation of the Internet has been debated for a decade. Our members have consistently told us that new government regulations should be the last, not the first, resort in addressing problems that arise on the Internet. The medium is extremely dynamic and regulations are—by definition—slow to develop and update; and government regulations—no matter how well intended in the United States—are only used to justify more and different regulations in other countries. Moreover, CompTIA has consistently cautioned governments to avoid regulating against theoretical problems that do not yet exist and to focus on problems that do exist.

Mr. Chairman, we believe that when problems arise in connection with the Internet, the most effective tools to address them are market forces, technology, end-user education and industry best practices. These techniques are flexible, global, and every bit as powerful as the Internet itself. If these tools fail, then government regulations should be sought as a last resort.

While we respect the concerns of those who have advocated the immediate regulation of Internet access services in the U.S. in anticipation that a problem might emerge—which could not then be successfully addressed through the private sector tools that I described above—we can not conclude that the time has come for wholesale government regulation of Internet access services in the U.S.

Conclusion

In closing, Mr. Chairman and members of the Committee, thank you for the opportunity to testify before you today. CompTIA believes that S. 2686 represents an important departure point in the update of U.S. communications law. For CompTIA and our largely VAR membership, this legislation would free-up needed spectrum; promote more competition for converged video, broadband services between local cable and telco providers; and ensure the Internet remains a vibrantly competitive place—however it evolves—for America's small businesses and consumers alike.

Mr. Chairman, I would be happy to respond to any questions you may have.

Senator INOUE. [presiding] Thank you very much.
Mr. Comstock?

STATEMENT OF EARL W. COMSTOCK, PRESIDENT/CEO, COMPTTEL

Mr. COMSTOCK. Thank you, Mr. Chairman.

You all have my prepared remarks, and I assume they'll be included in the record. Let me just touch briefly on three points that those remarks address. And it—they all, actually, in the end of the day, relate back to net neutrality and what we've been talking about.

I represent COMPTTEL, and we're an association of competitive network providers and competitive content and service providers.

We are in the business of providing not only transmission, but also content and services, so we are very much like the Bells, in many ways, shapes, and forms. We're not concerned about the imposition, or reimposition, of the basic nondiscrimination requirements that were the foundation of the Communications Act since 1934. The reason for that is very simple. We know full well from experience in the marketplace how difficult it is to negotiate with an incumbent who doesn't want to sell you service. We do it every day.

So, the reality is, some government rules are going to be needed if there's going to be competition. And the reality that the Committee has to deal with is the fact that the FCC has essentially pulled the rug out without a whole lot of consideration of the ultimate impacts.

They're doing this all in the name of, supposedly, broadband deployment, spurring broadband deployment. The reality is, today we have broadband facilities that pass over 90 percent of American homes, and practically 100 percent of American businesses. The issue is, are we going to build a second, third, or fourth set of networks? My companies are in the market every day trying to get money to raise capital to build networks. It's very difficult to do when you have to convince someone to finance you, because you're facing an entrenched incumbent, and it takes time to build these things, and then you have to get customers—again, from an entrenched incumbent.

So, I think the reality is that we're going to be sharing networks for quite some time, and that's what the Committee should focus on. This is about transmission. It's not about regulation of content and services; it's about regulation of transmission networks to ensure what? Nondiscriminatory behavior.

Network operators should make money by selling you transmission. They are also free under the law to sell you any other content and services they wish, whether it's video, or it's information services, or something else. There's nothing in the law today that prevents a Bell company from offering you any suite of services they care to choose. The issue is, can they use their transmission network ownership to benefit their content and services, and lever that into an unfair advantage against other people who would like to provide those content and services?

Let me go back to the example of the two phone lines. This is a very simple case. When you buy a second phone line in your house, you get to decide what you do with it. Do you hook your computer up to it? Do you put a fax machine on it?

As you've heard from testimony from Verizon, they would like to now say, in the "new world," as if it's somehow radically different from the "old world," that this new transmission network they're going to build to you, they'll—they will guarantee you they'll give you some capacity, but the rest of the capacity, they want to reserve for their exclusive use to provide you video services or whatever other services they can cut deals with. They, sort of, suggest that, "Gee, we can't do these medical services over the Internet." Well, I beg to differ. They're being done today, and they're being done today for 4 and a half million users in 208 different universities all across the country. You can do a VPN over the Internet. My companies do it all the time.

So, it doesn't have to be a single person owning that transmission line for you to do these exclusive services. What you have to have is some agreement on the standards and protocols.

What they're proposing will undo the Internet. Why? Because they will be able to impose different protocols to protect their content and services. Think about it. If I'm getting revenue from a set of video packaging, why would I allow someone else enough capacity to offer a competing package of video? That's why the cable companies don't give additional capacity on their network. They claim it's for management reasons and other things, but the new convergence allows you to be much more efficient. You can get more capacity over a smaller transmission pipe.

So, yes, they're building a big, fat pipe to the home, but then they're flipping it all on its head and saying, "Because we have that big pipe, now we should be able to reserve all of this space for ourselves."

So, if you want a broadband Internet, I think this committee has to take a hard look at what the real clash is, which is a clash between legal regimes. The cable rules in Title VI which give the network operator exclusive control over the distribution—and, by the way, the provisions in this bill would further enhance that by eliminating some leased access—or the common-carrier model—and, again, I'm not talking about price regulation or anything else, but the basic idea of nondiscriminatory access to content—to the transmission for the provision of content services, which is the way the Internet grew up. You're picking a different model by not adopting a net neutrality standard, by not adopting interconnection standards, by not adopting special access rules, which we firmly urge the Committee to support.

I really think you have to step back and say, how do these two models interface? And if you want a broadband pipe to the home, where the business or residence that's buying that transmission—and, by the way, yes, they should pay more for more capacity, absolutely—how are they going to be able to use that? So, you have to step back, look at the big picture. It is the difference. It's transmission networks, versus content and services. You need some rules for the transmission networks. You don't need to regulate the content and services. And I don't think anyone on this panel is suggesting that you do.

Thank you very much.

[The prepared statement of Mr. Comstock follows:]

PREPARED STATEMENT OF EARL W. COMSTOCK, PRESIDENT/CEO, COMPTEL

Mr. Chairman and members of the Committee, my name is Earl Comstock. I am the President and CEO of COMPTEL, the communications association of choice, which represents all types of competitive communications providers. COMPTEL has more than 180 members and is celebrating its 25th year representing competitors in the communications marketplace.

COMPTEL thanks the Committee for holding this hearing on S. 2686, the Communications, Consumer Choice, and Broadband Deployment Act of 2006. The introduction of this bill has helped to focus the debate on communications reform, and the bill provides a good starting point for further deliberations and action by this committee, to enact legislation this year.

COMPTEL would also like to commend the Committee for the process through which it is considering communications reform. The numerous hearings held earlier this year helped provide a foundation for this bill, and these hearings on the bill,

as well as another hearing that is already announced that will be held on a revised draft of the bill that will be issued shortly, all provide a sound record on which the Committee can base its deliberations at mark-up. By not rushing the process, the Committee is ensuring that the public will have an opportunity to comment, and COMPTTEL applauds that process.

S. 2686 contains numerous provisions that are needed to promote competition and protect consumers, including Universal Service reform, competitive access to programming, and implementation of the transition to digital television, and COMPTTEL supports those provisions. The bill also contains provisions, for example, video franchise reform and restrictions on municipal broadband, that are sought by certain players to enhance their competitive position, and it is in this area that the Committee should focus its efforts on ensuring the playing field does not become tilted in favor of one industry segment over the others. COMPTTEL is concerned that the bill, as introduced, is skewed heavily in favor of one industry segment, namely the incumbent Bell Operating Companies, at the expense of many other players. It is neither fair, nor good public policy for the Committee to include changes in law sought by the Bells to improve their ability to compete in new markets, without also including provisions to ensure that others can enter and compete in the Bells' core markets. It is to rectify this imbalance that COMPTTEL suggests the following changes or additions to the bill.

The three areas that my testimony will focus on are the need for: (1) reinstatement of interconnection requirements and local competition rules, (2) special access reform, and (3) strong, enforceable net neutrality rules. The bill already includes provisions on Net neutrality and interconnection, and COMPTTEL proposes to significantly strengthen those provisions. The bill does not currently include language on special access reform, and COMPTTEL urges the Committee to add language to address this issue.

Reinstatement of Interconnection and Local Competition Rules

S. 2686 currently includes a provision, section 214, that would extend to "IP-enabled voice service" providers the same "rights, duties, and obligations" as a requesting telecommunications carrier under section 251 and 252 of the Communications Act. COMPTTEL is pleased that the sponsors of the bill recognized that VoIP service providers are experiencing interconnection problems; however, the provision does not go nearly far enough. First and foremost, the FCC has nearly eliminated the rights that Congress granted to requesting telecommunications carriers in sections 251 and 252 through a series of decisions over the past several years that have virtually gutted the effectiveness of those provisions. As a result, it is not clear that IP-enabled voice service providers, any more than requesting telecommunications carriers, will be able to get the interconnection and collocation that the bill seems to intend.

Second, COMPTTEL is concerned that by defining "IP-enabled voice services" and treating them separately from voice services delivered using other technologies, Congress would be further balkanizing the legal regime that applies to communications services. Does Congress intend, for example, that cable operators should be given more favorable rates for the use of poles, ducts, conduits than other competitive carriers offering IP-enabled or any other voice services—because that would be one of the effects of separating out IP-enabled voice service from all other voice telecommunications. Likewise, does Congress intend that IP-enabled voice services will not be subject to the customer privacy rules of section 222 of the Communications Act—because that would be another likely effect of classifying IP-enabled voice services separately.

The reality is that all competitors—CLECs, cable operators, wireless carriers, and even rural carriers who adjoin the service territories of larger incumbent carriers—all depend on specific provisions of law in the Communications Act for their interconnection to incumbent carriers. COMPTTEL recommends that the Committee adopt a broader interconnection section that would reinstate the pro-competitive requirements that Congress has adopted and reaffirmed numerous times in the 70 plus years since the Communications Act was adopted.

Attached in the appendix is COMPTTEL's recommended language to restore interconnection and other requirements needed to ensure a competitive communications marketplace. It would ensure that existing provisions of the Communications Act continue to apply to the Bell companies and other incumbent local exchange carriers, and also that incumbent cable operators are treated as CLECs when they chose to enter the voice or data communications markets.

Congress adopted the Telecommunications Act of 1996, after nearly four years of hearings and debate over how best to promote competition in the provision of voice, video, and data services. In particular, Congress spent considerable time and effort

on crafting rules to open the local markets controlled by incumbent local exchange carriers, and in particular, the Bells, to competition. They also crafted rules to promote competition in the video marketplace, in the full expectation that the Bells would enter video, and the cable companies would enter the local phone and data markets. Congress enacted the 1996 Act because promoting competition is the least regulatory, and most effective, way to force consumer prices down. The alternative is retail price regulation, something that has been tried before in both the telephone and cable markets with unsatisfactory results.

Ten years later, many consumers and businesses are still waiting for the competitive benefits promised by the 1996 Act. Despite numerous public statements and commitments to both State legislatures and the FCC, the Bells did not enter the video market to any significant degree, and also made no effort to compete outside their established service territories. Cable did enter the residential data marketplace by offering cable modem service, and is now finally starting to offer competitive residential voice services on a large scale. And competitors entered the local market to provide competing voice and data services to both business and residential consumers, which allowed the Bell companies to enter the long distance market. For a brief period, many consumers actually started to get competitive choices in local voice and Internet access services, but then the FCC started removing the rules that had made the competition possible. And now Congressional action is once again needed to ensure that consumers do not lose what they started to gain under the 1996 Act.

Today, four facts dictate the options Congress has to promote competition, and bring down consumer prices for all communications services. The first fact is that the incumbent telephone companies are the only entities with a wireline network that reaches all business and residential customers in any given area. The second is that the incumbent cable operators have the only wireline alternative network that reaches nearly all of the residential consumers in a particular area, though that same network reaches very few business customers. The third, and perhaps most important, fact is that both the incumbent telephone companies and the incumbent cable operators were each allowed to build their network over the course of a decade or more while protected from competition, with the assurance that they would get all of the customers that chose to purchase their respective phone or cable service in that area. Finally, it is clear, both here and elsewhere in the world that wireless services are a higher-priced complement to, and not a substitute for, wireline network data services. As a result, incumbent telephone companies and incumbent cable operators retain at least 70 percent market share in their core service more than 10 years after passage of the 1996 Act.

The reality is that, in both the residential and business markets, the construction of additional ubiquitous wireline networks will not occur. No competitor can get the financing for such an undertaking, and consumers do not want to pay for yet another network. Even in the wireless marketplace, where incumbent cellular operators had much less of a head start, there is consolidation and dominance by the two incumbents.

In light of these facts, which preclude the FCC's model of "inter-modal" competition (i.e. each competitor can reach the end user by building its own wired or wireless network), Congress needs to adopt rules which require network operators, and in particular the two wireline network operators that were allowed to build their networks, and establish a customer base while protected from competition, to provide reasonable and non-discriminatory access to those networks. The scarce resource in communications markets is the transmission network. By requiring network operators to allow everyone to use these essential facilities to reach consumers, consumers will receive the benefits of competition—lower prices, better service, and greater innovation.

The key measures needed to ensure reasonable and non-discriminatory access by competitors include (1) access to elements of the network so that competitors can create their own services; (2) interconnection at any technically feasible point; (3) the ability to collocate equipment; (4) the ability to attach devices to the network; (5) the right to resell transmission between or among points on the network as part of their own voice, video, and data offerings to consumers; (6) the right to use any technology and offer any service that does not harm the network; (7) non-discriminatory allocation of all transmission capacity on the network (i.e., elimination of cable rules that allow network operators to reserve capacity for their exclusive use); (8) reasonable terms and conditions for each of these measures; (9) a neutral arbitrator to resolve disputes; and (10) efficient enforcement mechanisms to execute these rights. All of these provisions were included in the requirements Congress adopted in the 1996 Act, and Congress needs to reinstate those requirements now if it wants to ensure competition for voice, video, and data services.

Special Access

Special access is a dedicated transmission link between two places. It is provided, almost exclusively, by the Bell companies and other local exchange carriers (LECs) as a critical input for wireless, long distance, and Internet services providers for “last mile” voice and data connections. Wireless carriers depend on special access service to connect thousands of cell sites to their switching centers that carry millions of calls and messages. Special access differs from “switched access,” which is the per-minute fee charged by LECs for use of their facilities to switch and transmit ordinary voice traffic. Switched access also connects two different carrier networks, rather than two points on the same carrier network as special access does.

In 2004, the Bell companies received more than \$15 billion in special access fees from wireless, long distance, Internet, and other communication’s carriers. By charging exorbitant special access fees, or “last mile connection” fees, the largest three Bells earned returns of 32 percent (Verizon), 67 percent (AT&T), and 82 percent (BellSouth) on these special access connections. The largest three Bell companies (which will become two if the AT&T-BellSouth merger is approved) control 82.9 percent of the special access revenue in the U.S.

Because the incumbent LECs own the only wireline facilities that reach the vast majority of businesses in the country (cable companies do not serve most business customers), competitive carriers have no choice but to purchase special access service from the incumbents. Prior to their acquisition by the Bell companies, AT&T and MCI offered the nationwide alternative to incumbent LEC special access services, but those alternatives disappeared as soon as SBC and Verizon bought these two competitive giants. Because they own and control the connections to almost all business customers in their respective business territories, the Bell companies, in particular, are now able to raise wholesale rates for special access services sold to competing carriers, as well as retail special access rates sold directly to business customers, resulting in price increases for those customers.

Special access rates impact not only competitive LECs, but also wireless carriers and cable companies as well. In the absence of access to these special access services, for example, wireless companies cannot interconnect their services with the wireline network. Competitive providers of broadband services, including cable companies and competitive data providers, that depend on special access lines to connect their facilities to the Internet backbone will also be adversely affected. Special access services are vital inputs to many of the services that COMPTTEL members offer to consumers, and small and medium-sized businesses. As a result, price increases in special access service are passed on directly to consumers, increasing the cost for all services.

To address this problem, COMPTTEL proposes that the Committee include language to prohibit anti-competitive provisions in special-access contracts and reinstate the FCC’s rules that ensured that special access services are not sold at prohibitive, monopoly rates. We are currently finalizing language with other interested parties, and will submit that language to the Committee shortly.

Net Neutrality

COMPTTEL testified previously on the importance of including strong Net neutrality safeguards, and we are pleased to see that Title IX of the bill is devoted to Net neutrality. However, a reporting requirement alone will not address the problems that COMPTTEL and many others have outlined at length. Since S. 2686 was introduced, Senators Snowe and Dorgan, along with several other Senators, have introduced S. 2917 to address Net neutrality concerns. COMPTTEL supports the inclusion of S. 2917 in S. 2686, and hopes the Committee will act expeditiously to include it.

Conclusion

Taken together, the addition of the three amendments COMPTTEL proposes will significantly improve the bill, and will correct the competitive imbalance created by some of the current provisions in the bill. COMPTTEL looks forward to working with the members of this committee as you continue your deliberations on S. 2686, and I would be happy to answer any questions.

APPENDIX

Title I of the Communications Act of 1934 (47 U.S.C. 151–161) is amended by adding at the end of such Title the following new subsection:

“SEC. 12. CONTINUED INTEROPERABILITY OF COMMUNICATIONS.

“(a) IN GENERAL.—In order to ensure the continued interoperability of the Nation’s communications networks for emergency communications and enable the com-

petitive provision of wireline and wireless telecommunications services and information services, any entity that was or is an incumbent local exchange carrier, and any affiliate of such carrier, shall be treated as a common carrier, telecommunications carrier, local exchange carrier, and incumbent local exchange carrier with respect to all wire communications facilities owned or controlled by such carrier or affiliate, regardless of the—

“(1) classification of the services offered by such carrier or affiliate using such facilities,

“(2) transmission and switching technology used, or

“(3) physical composition of such facilities,

and such carrier or affiliate shall comply with the requirements of sections 201, 202, 224, 332(c)(1)(B), 251, 252, 259, and 271 with respect to any request by a telecommunications carrier for access to such wire communications facilities, or for transmission provided using such facilities, for the provision of any telecommunications, telecommunications service, video programming, or information service, regardless of the transmission or switching technology used by such requesting telecommunications carrier to provide such services. A Bell Operating Company and any affiliate of such company shall provide transmission capacity between or among points on its wire communications facilities to any requesting telecommunications carrier at cost-based rates.

“(b) INCUMBENT CABLE OPERATORS.—In order to ensure the continued interoperability of the Nation’s communications networks for emergency communications and enable the competitive provision of wireline and wireless telecommunications services and information services, any entity that is an incumbent cable operator that provides information services, telecommunications, or telecommunications services to subscribers using the facilities of its cable system, and any affiliate of such operator, shall be treated as a common carrier, telecommunications carrier, and local exchange carrier, with respect to all wire communications facilities owned or controlled by such operator or affiliate, regardless of the—

“(1) classification of the services offered by such operator or affiliate using such facilities,

“(2) transmission and switching technology used, or

“(3) physical composition of such facilities,

and such operator or affiliate shall comply with the requirements of sections 201, 202, 224, 332(c)(1)(B), 251, and 252 with respect to any request by a telecommunications carrier for access to such wire communications facilities, or for transmission provided using such facilities, for the provision of any telecommunications, telecommunications service, video programming, or information service, regardless of the transmission or switching technology used by such requesting telecommunications carrier to provide such services.

“(c) WAIVER OF SECTION 10 FORBEARANCE.—The requirements of subsection (a) shall apply to a Bell Operating Company and any affiliate notwithstanding any prior or future forbearance decision by the Commission under section 10 with respect to any such company or affiliate or any service provided by such company or affiliate.

“(d) DEFINITIONS.—For the purposes of this section—

“(1) INCUMBENT LOCAL EXCHANGE CARRIER.—The term ‘incumbent local exchange carrier’ shall have the same meaning as that term has in section 251(h).

“(2) INCUMBENT CABLE OPERATOR.—The term ‘incumbent cable operator’ means, with respect to an area, the cable operator that—

“(A) on the date of enactment of the Telecommunications Act of 1996, provided cable service in such area; or

“(B) is the successor or assign of the cable operator described in subparagraph (A).

“(3) CABLE OPERATOR, CABLE SYSTEM, AND VIDEO PROGRAMMING.—The terms ‘cable operator,’ ‘cable system,’ and ‘video programming’ shall have the same meaning as those terms are given in section 602.”

Senator INOUE. Thank you very much, Mr. Comstock.

Before I lose my voice completely, I wish to thank all of you for your presence this morning. The testimony this morning has been extraordinary, and my only regret is that the other members of the

Committee are not here. But I'm certain they'll read your full statement, and you may be assured that your full statement, and all your exhibits, will be made part of the record.

Mrs. Boxer?

**STATEMENT OF HON. BARBARA BOXER,
U.S. SENATOR FROM CALIFORNIA**

Senator BOXER. Thank you so much, Senator.

And with the indulgence of the Chair, I wanted to mention that—I wanted to thank this committee for its past work on revealing the scam—the Enron scam. We worked long and hard on that. Today, Ken Lay and Jeff Skilling were convicted on a number of charges, including fraud, and this hits home to my heart. My people paid a heavy price, billions of dollars, for their greed, and I just—I feel this committee has worked in a bipartisan way on so many issues, and that one, in particular, I wanted to say thank you to my colleagues on it.

I wanted to say, if Senator Stevens was here, to thank him for this second hearing on his bill, and for saying he's open to change. And I think there are some areas we can work together on. And since the last hearing, Senators Snowe and Dorgan introduced the Internet Freedom Preservation Act. I think it's a very good bill, and I'm happy to be a cosponsor.

As we know, this bill would prohibit broadband service providers from discriminating based on the content, application, or service being used by a consumer. I think it's important legislation, it should be part of any telecom reform bill. And my understanding is, the House is marking up a piece of legislation today, and I don't know what shape it will take, but I'm very interested to see what our colleagues in the House are doing on this.

The Internet has transformed the economic and social lives of Americans. And coming from California, I can tell you, the whole world, in many ways—in California, the whole communications world—revolves around the Internet. And much of its success could be traced back to the openness of the network design. Anyone can get on the web and offer a service, or post ideas, that can reach any other interested party with access to the net.

Now, traditionally, network operators have not interfered with their customers' access to the Internet. Instead, they've provided an open door, and allowed the customer to decide what comes in and goes out of their home. In exchange, we customers pay a pretty hefty fee for broadband access. If consumers want faster access, they pay more for higher speeds. I have no problem with that. In fact, it's the most transparent and fair way to compensate network operators.

And, Mr. Regan, you said it's important to focus on the consumer. I couldn't agree with you more. We just have a little bit of a different view. I look at the FCC guidelines, I think they're vague. They're vague. So, just going with those, I don't think that's the trick. I think if you focus on the consumer, you need to build net neutrality into our laws.

We know, because Senator Dorgan has read us what some of the providers have suggested in terms of fees, that would hurt consumers, at the end of the day, because it would discriminate

against where they can go to get their information, and also the new Googles and the new Yahoo!s of the future are going to be greatly disadvantaged. So, at the end of the day, I think, if we want to keep fostering democracy, give individuals the power to reach more people and share their views, we do need to do something on net neutrality.

And in the remainder of my time, I—can I ask a question of Mr. Tauke? Is that how I say your name? Is that right? If you were to decide to charge a fee to the Googles and the others, would you then no longer charge a fee to consumers?

Mr. TAUKE. Well, Senator, we have no interest in charging a fee for Internet access to Google. If Google, however, would approach us, and they wanted to provide another service that didn't travel over the Internet, yes, then we would charge them. We would charge them for that, just as we charge other companies for special network arrangements.

Senator BOXER. OK.

Mr. TAUKE. So, if it's access to the Internet, we have no interest in charging them a fee.

Senator BOXER. And you would—and you have—and you have no interest in charging anyone a fee at all.

Mr. TAUKE. For Internet access, we charge the consumer the fee.

Senator BOXER. And they would be—so, why would you object to putting net neutrality in the law?

Mr. TAUKE. Because, as I've been attempting to explain this morning, the net neutrality legislation that has been considered applies not just to Internet access, but it applies to all network access. And, while we—the—for—I think that you've got to understand that we've had a change, a real change, in paradigm. When we had dialup Internet access, we had common-carriage or non-discrimination provisions applied to that. When broadband Internet access was applied to—was introduced by cable companies, they never had a nondiscrimination provision. Then the FCC said, "What we offer"—

Senator BOXER. Wait a minute. You're just getting into a history book here. I'm looking at what your problem is with our legislation. I just—

In closing, Mr. Scott, could you comment on this? What would the Internet look like today if telephone companies in the 1990s had been given the right to control the traffic on the net?

Mr. SCOTT. It would look like the cable TV system. Basically, the operator would choose a suite of services from which the consumer could select. It—the idea of innovation without permission that the Internet has so, you know, boldly and revolutionary, as a concept, embodied would be completely unknown to us.

Senator BOXER. Thank you, Mr. Chairman.

Senator INOUE. Thank you.

Senator Burns?

Senator BURNS. I must have missed something here somewhere. I must have missed something. I'm—a link dropped out.

I've got a couple of questions here before—Mr. Tauke, you're going to take fiber to the home.

Mr. TAUKE. Correct.

Senator BURNS. What's going to be your—what's your bandwidth there, and what's your speed? Do you know what will go into each home?

Mr. TAUKE. Well, we'll have—today, we offer speeds of 5, 15, and 30 megabits per second over the fiber for Internet access. That will increase in the future, depending on what consumer demand is.

Senator BURNS. Now—and you also—do you—you also offer the plan—you plan to offer your own voice, data, and video services, is that correct?

Mr. TAUKE. We do offer our own voice, data, and video services, but you don't need to take any of our voice, video, or data services.

Senator BURNS. But do—but even if you do not, does that affect the capacity of that pipe that's coming into the home?

Mr. TAUKE. No.

Senator BURNS. After your own services, how much capacity will you have on your network, do you figure?

Mr. TAUKE. The beauty of fiber—

Senator BURNS. If I took your voice, video, and all the services that you're going to offer over your pipe, how much capacity would I have left over of—to allow traffic to come in and out of my house?

Mr. TAUKE. It would depend on what you purchased in the way of Internet access. If you purchased a 30-megabit Internet access, you'd have 30 megabits. If you purchase 50 or 70, as we'll offer down the road, you'd have that. The beauty of fiber is that it's—

Senator BURNS. What's the basic, then? What would be the basic? Five?

Mr. TAUKE. The basic? I suppose 5 megabits—

Senator BURNS. OK.

Mr. TAUKE.—is the least you buy today—

Senator BURNS. OK.

Mr. TAUKE.—the cheapest price, on fiber.

Senator BURNS. All right, now go ahead with—

Mr. TAUKE. Yes, I was going to say, the beauty of fiber is, you have virtually unlimited capacity. And I think that that's why this is a new world that has a different paradigm than the old world. In the old world, when you had restricted capacity, there was concern about discrimination. Where you have—where you're moving to a world of almost unlimited capacity, there—it should not be a concern about discrimination.

So, we will give you as much Internet access as you want. We'd also like to be able to offer you other services that don't go through the Internet.

Senator BURNS. And who pays for that?

Mr. TAUKE. Well, the consumer would be paying for some of those services, but it also could be that a company that is offering the services buys it. So, for example, suppose you are a heart patient coming out of a medical center, and they want a heart—do your heart monitoring at home, or you're a diabetes patient, and they want monitoring, and suppose they don't want to use the Internet, because there is no carrier who has accountability for the end-to-end services. Presumably, the medical center would purchase the service from us—the network service from us—to do the monitoring, and they would probably charge the patient something

for that service. So—but it would be part of the way that new services could be delivered to consumers.

Senator BURNS. And you could add new capacity, should you need more capacity, is that correct?

Mr. TAUKE. Yes, but—

Senator BURNS. Almost immediately?

Mr. TAUKE.—you put additional electronics on the fiber, and you add more capacity.

Senator BURNS. Thank you.

Thank you, Mr. Chairman.

Senator INOUE. Thank you.

Senator Snowe?

Senator SNOWE. Thank you, Mr. Chairman.

And thank you all for your testimony. And obviously it reflects a cross-section of views that we'll obviously have to sort out. And my bill obviously, with Senator Dorgan, Senator Boxer, and Co-Chair Inouye, takes an approach, because we do fear what people have described as the unintended consequences. And, frankly, sometimes it's very difficult for Congress to forecast the future, but I think we can anticipate that there will be some, you know, consequences as a result of what has, you know, been decided by the FCC.

I mean, even some of the CEOs of the large network operators have already indicated that their plan—they've stated publicly their intentions to charge, you know, fees for content and so on. So, we do have a problem on the horizon, and the question is, wow do we wrestle with it? Because my greatest fear is that you will have the "cable-ization" of the Internet. I mean, I think that that is abundantly clear that ultimately, whether intended or not, that's where it's going to go. And it'll be much of a surprise to the consumer—has a very different experience with the Internet today.

So, I'd like to ask each of you to address this question, you know, on the realism of this fear, because otherwise I'm very concerned that we're going to deny people the access. It's not so much to have the means by which you get there, the question is what you get once you get there. And that's the problem. So, you'll have the upgrades on the broadband, very little competition in that market nationally. We know that. There will be no competition, virtually speaking. There is none. And then, second, they're going to be denied the access to the unlimited information, based on content and other services that cable today currently provides under the Internet.

So, I'd like to start with you, Mr. Misener and go down the panel. I'd like—because this is the greatest concern of all once you start tiering-up the access. It's not a question that people aren't going to be paying more for access, it has got to be in a nondiscriminatory fashion. Once you get there, you know, is it going to be an empty pipe, or is it going to be a full pipe that, you know, opens the world in the realm to unlimited information and services? And that's what this issue is all about. And it is going to fundamentally change, and radically alter the Internet as the public knows it today.

Mr. Misener?

Mr. MISENER. Thank you, Senator Snowe. And thank you, again, for your leadership on this issue.

We are here—Amazon.com and the coalition of companies that I represent—are here because—precisely because things have changed. The technology has changed to allow discrimination easily, in a way that was not possible before, by the network operators. The market has changed radically. We've gone from dozens of ISPs available to any consumer, down to two or fewer. That's not going to change anytime soon.

We've seen these regulatory changes, where the nondiscrimination rules that had governed Internet access from the inception have been removed prematurely, based on the hope of competition.

And, last, we've heard what you've talked about, Senator, the announced plans of the CEOs, who have said, forthrightly and, you know, refreshingly honestly, that they intend to discriminate the way we fear. So, it would really be, you know, in my view, to turn a blind eye to the very obvious and real, clear and present danger to consumers.

Senator SNOWE. Thank you.

Mr. Tauke, welcome. A former colleague. We served in the House of Representatives together. We won't say how long ago.

[Laughter.]

Senator SNOWE. But I know you stated the intention of Verizon not, you know, to go down that path. But the fact is, there are others who do, and that is going to be the dilemma.

Mr. TAUKE. Senator, I'm not aware of any company CEO, or other leader in the company, who has said that they intend to discriminate for Internet access. They have indicated that, for access to various other services, they may provide some unique arrangements for providers of those services, but I don't think there is anybody who intends to discriminate on access.

Let me just observe that in the last 2 years we have had an increase in the number of ISPs and an increase in the number of zip codes with four carriers of broadband service. A few years ago, we didn't have many zip codes with four broadband providers. In the latest FCC study, 60 percent of zip codes have four broadband providers. The amount of increase in competition in the access market is truly astonishing over a short period of time. And we're on the verge of having WiMAX and WiFi and so many other types of technology for the Internet over broadband—or over powerlines, which is coming in Manassas. All that's happening in the marketplace.

Senator SNOWE. But in—

Mr. TAUKE. So, let me just say one other—make one other point. You know, we've also had an explosion of ISPs. Paul just said there are just a few left. There are 1,100 ISPs, the Internet Industry Association just reported. The number is going up. Websites are going up. There is robust competition in the market.

Senator SNOWE. Do you want to respond to that, Mr. Misener? I see you—

Mr. MISENER. Thanks—

Senator SNOWE.—shaking your head.

Mr. MISENER.—Senator Snowe. We—the fact of the matter is, any consumer, in his or her home around the country, has, at best, two choices for broadband Internet access, the phone or the cable

company. 99.5 percent of American consumers today get their broadband and Internet access from either the phone or the cable company. So, there may be many in a zip code, but there is no such thing as a cable or a telco overbuild. It just—the hopes of the 1996 Act failed, in that respect.

Senator SNOWE. But didn't a lot of the broadband deployment—wasn't it already underway, by your company, for example, and other companies, back in 2003, as with others, before the FCC made their decision? So, that was the stated intention. In many companies, it already was underway to begin with?

Mr. TAUKE. Senator, we were offering DSL service over the copper line. Now we're replacing the copper with fiber to the home. That project got underway after the FCC acted. There simply is not a business case that I know of for deploying fiber if we are unable to do more with the fiber than just provide Internet access.

Senator SNOWE. What is the problem—and I'll go down the line and continue—what is the problem for the Congress to pass this legislation if, in fact, the intent isn't what it is? I mean, this legislation is not dealing with television services. It's dealing with just a slight portion, which is the Internet, so that we preserve what we have today. I mean, that's what it's all about. And people say, "Well, you know, we're regulating." Well, that's an interesting juxtaposition, considering the fact these nondiscrimination standards were already in place, they were already protecting the Internet. Decisions were made by the FCC, very different ones, very deliberate, in the sense of not setting that standard anymore, and changing the definition of services. So, Mr. Regan, do you think that this—you know, what do you think? Do you think we're—are these unrealistic fears on our part?

Mr. REGAN. Senator, thank you. And, you know, I appreciate your leadership on this issue, and I certainly do appreciate your concerns, and I appreciate the concerns of Paul and his colleagues. But, quite frankly, I think that if any carrier—any carrier—restricted a consumer's access to the Internet, they'd be clobbered. They'd be clobbered by the FCC, and they'd be clobbered in the Congress. And they should be, bottom line. So, I don't share that concern.

I think that the—in the—there's a history here in which we've established a standard behavior based upon the connectivity principles that we developed, and the FCC adopted, in which people simply realize that this doesn't make any sense. And so, they're not doing it. And I think if they did, the FCC, and you, would be in—certainly in a strong position—and, frankly, I'd support you in your effort to try to deal with it.

Senator SNOWE. But it may well—

Mr. REGAN. I should also like to point out another thing. Paul keeps saying that this—all this was developed around the non-discriminatory principles of Title II, which is common-carrier regulation. Well, that's just plain wrong. In fact, the first people to provide broadband Internet access were cable companies, you know, that are regulated under Title VI. They're not common carriers. So, that business took off. And then Tom and his colleagues responded with DSL. And then Tom and his colleagues decided they wanted to get into video, so they put even more robust capacity in.

Senator SNOWE. Yes, but cable—you have to pay a substantial sum of money now in even your access, so you don't get what you want, I mean, at times. So, that's the issue here. I mean, that's—the same is going to be true of the Internet. That's the problem we're going to be facing. And, ultimately, if that comes to pass, it does restructure the Internet, and certainly the public's experience with the Internet. And that's going to come as a major surprise, not to mention expense. So, they can have the access. That's not the question, the access. You can pay for that access. That's not changing. What's changing is what you get when you get there, and who's going to be able to get it, if they can afford to pay those charges. That's the point. And that is going to create a distinction, two different worlds.

Mr. Scott, would you like to respond?

Mr. SCOTT. Yes, Senator. I find the rhetoric of absolute denial that there will never be any blocking, there will never be any impairment, there will never be any discrimination, slightly disingenuous, because if we were to operate on the logic that we need not pass any consumer protections if the operator in the market promised not to do bad things, we wouldn't need any consumer protection rules at all. I'm sure if you went to the cable operators and said, "Do we really need program access rules on a nondiscriminatory basis, or will you just promise us that you won't do it?" they would say, "Sure, strip the rules away. We won't do that." We have rules in place to protect consumers, we have rules in place to protect competition, for a reason, and for a very good reason, and that is that when a monopoly provider or a duopoly provider sees an opportunity in the market to extract revenues, they will do so. That is simple economics that I think are unavoidable as you look at this issue.

Senator SNOWE. Thank you.

Thank you, Mr. Chairman, for also giving your time. Thank you.

Senator INOUE. Thank you.

Senator Pryor?

Senator PRYOR. Thank you, Mr. Chairman.

And what I'd like to do, if it's OK with the panel, is, I'd like to pick on Mr. Scott and then allow the other panelists, if they would like, to comment on my questions and also on his answers, if that's OK.

Mr. Scott, intuitively, to me, when I hear of someone saying they're going to prioritize one service, that implies to me that they unprioritize other services. Is that—is my intuition correct on that?

Mr. SCOTT. That's right. It's a zero-sum game.

Senator PRYOR. And if you unprioritize some services, you may degrade those services? Is that your concern?

Mr. SCOTT. Yes, sir.

Senator PRYOR. And I know one thing that we've commented on, here and there, throughout the hearing today is this clash, really, between the Internet and Wall Street. Wall Street obviously looks at profits, they look at investments, they look at returns, they look at all these factors, and they want companies to provide—to behave certain ways in order to be profitable, but, at the same time, that culture may clash with so-called Internet culture, if there is such

a thing, that it be, you know, open and equal access for all. Would you like to comment on that? Is that a fair statement?

Mr. SCOTT. Well, I think what Wall Street is interested in is seeing the opportunity for a new revenue stream to tax the content, and service and applications providers to be capitalized on. And, from a consumer perspective, I have a great sensitivity to that, that—will the consumer have to bear the full cost of the network? I think that's an important point. But the reality is that if you set up toll booths, and you levy taxes on all of the millions of Internet content providers, they're not just going to eat those costs. You know, my friend Paul at Amazon is going to raise the prices of his books.

Senator PRYOR. Right.

Mr. SCOTT. So, ultimately, the consumer is going to pick up the tab for the network. So, if we're going to pay the tab anyway, I'd like to hang onto that nondiscrimination that puts the choice in the hands of each and every household, as opposed to the network operator.

Senator PRYOR. And you heard Mr.—and, I'm sorry, is it Tauke? I'm not sure—is that how you pronounce it? I'm sorry. You heard Mr. Tauke, a few moments ago, say that the industry, as far as he knows, does not intend to discriminate on access. Do you have a concern that they will discriminate on access?

Mr. SCOTT. Well, I read in the papers that they intend to discriminate on access. And I feel that if they have no intention of discriminating on access, they would have no problem with net neutrality being in the law.

Senator PRYOR. All right. Now, let me ask this one final question. I think it'll be my final question, and that is—when I look at Senator Stevens' bill that he's filed, and when you look at the provision in there on USF, he uses a phrase—and I'm not sure I have the phrase exactly right, because I don't have it in front of me—but, basically, when it comes to the Universal Service Fund, things need to be technology-neutral and competitively-neutral. And I know that's a different concept with USF than what we're talking about today, but I think there are some similarities there. And I think one thing that is confusing, or a little bit hard for us to think through is, it seems to me that we really should, maybe, break down net neutrality, maybe along those two lines. It seems to me that there is some genuine legitimate technology reasons why things should be neutral, in a sense, but it's okay in the technology world to prioritize certain things over others. I don't understand all the technology, but that's the way I understand things working, because it only makes sense in the technology world. But, at the same time, my sense is, what most people fear is when the Internet is not competitively-neutral—in other words, when one company, an ISP or—you know, whatever it may be—gives some sort of competitive advantage or disadvantage to consumers on the Internet. And I—if I understand it, that's really the rub, in your mind. It's not so much the technology in the sense that in the technology world it's okay—I don't want to say “to discriminate,” but neutrality would include the fact that some things need to be prioritized over others, for technical reasons. But what you're concerned about is more on competitive neutrality. Is that fair to say?

Mr. SCOTT. Well, I think the simple answer is, you can prioritize without discriminating.

Senator PRYOR. Right.

Mr. SCOTT. And that is in the Snowe–Dorgan bill explicitly.

Senator PRYOR. OK. And the last thing I was going to say—and I would love to hear from the panelists—just, Mr. Chairman, I’m reminded of a interview I read years ago from Bob Dylan, where they asked him about how rock-and-roll music went from, sort of, concert venues in theaters, et cetera, into big football stadiums. And his comment was, “Well, it’s just big business moving in.” And I sense that, really, what we’re looking at now is a whole different business climate that may be about to develop with the Internet, which is not all bad, but I think we just need to be careful with it.

So, I’d love to have any comments from the panel, if that’s okay.

Mr. COMSTOCK. Senator Pryor, if I might, I think you pointed out, with respect to the Universal Service provisions, that it’s competitive neutrality, which we obviously all support. I think it’s also worth noting that, within the bill that you’re considering, S. 2686, there are provisions that the Bell companies have actively sought for their new entry into the video market which establish dispute resolution processes, require interconnection of video providers, and even allow the FCC, in resolving disputes, to set prices. So, their—they view the cable operator’s control over content much as we view the network operator’s control over transmission. It’s a scarce resource, in some senses. And if you can lock it up and reserve it for yourself, then competitors are going to have a very difficult time entering the market.

So, we’re—that’s one of the points we would make, is, without some rules—and they even admit it for the entry into video, which, by the way, they’ve been allowed to do since the 1996 Act, they’ve just chosen not to—they see a very strong need for strong program-access rules, and these similar types of rules that are over in the House side, they were in Senator Ensign’s bill. So, I mean, it’s clear that they understand that certain rules and regulations are required to facilitate their entry into business. And I think what the competitive community finds so difficult to understand is, why, then, are there—are they—is it so difficult to understand why we need interconnection rules, and other things to prevent discriminatory behavior, which, by the way, is going on today even in the face of Communications Act rules that say you can’t, things like tying arrangements in special-access contracts, that make it very difficult for competitors to operate, that require you to buy additional services that you don’t need, or service in areas that you don’t want, or, better yet, don’t buy from the competitor at all. They’ve actually got contracts that restrict you from doing that.

So, even in the face of rules, you run into these problems. And what we’re really concerned about is, in the absence of any rules whatsoever, we realize exactly what we’re going to face, and that will be the cable-ization of the Internet.

Mr. TAUKE. Senator, thank you for the opportunity.

Senator, here’s the way I look at this. Today, we are building a network, which gives to consumers all the Internet access they have today, plus much, much more Internet access. And we are in

no way hindering that Internet access; we're facilitating it and giving them much more capacity to get to the Internet with full and open access than we've had before.

In addition, because of the capacity of this network, we can offer video services to compete with cable, which will drive down prices and, the Phoenix study just said, will save consumers \$8 billion a year. Then, beyond that, we have the ability to offer new other services that we don't even know what they are yet.

If you say there is nondiscrimination on that last piece of the network, in essence what you are saying is that we can't differentiate. If you can't differentiate, you can't innovate. It'll become a commodity, and everything becomes the same. If all network providers are commodities, then I don't think you are going to be able to get a business case to build fiber to the home, nor will you be able to offer—get the business case to build other networks.

The key to getting a competitive market moving is to be able to differentiate and get a leg up on the competitor in the marketplace. So, whether you're WiMAX, Wi-Fi, the power companies trying to deliver broadband over the powerlines, or whatever it happens to be, all those network providers need to differentiate and offer different kinds of services, and nondiscrimination means commoditization and no innovation for consumers.

Senator PRYOR. Senator Boxer?

Senator BOXER. Thanks, Mr. Chairman.

Mr. Tauke, you've been getting most of the questions. There are some more quotes I wanted to read to you. Now I can't find where they are. Oh, here they are. OK.

January 6, CEO of Verizon, Ivan Seidenberg, addressed a consumer electronics show, quote, "We have to make sure content providers don't sit on our network and chew up our capacity."

February 7, 2006, Senior VP and Deputy Verizon General Counsel, John Thorne, comments, in the *Washington Post*, "Google is enjoying a free lunch that should, by any rational account, be the lunch of the facilities providers."

Look, I don't want to take anybody's lunch away. I certainly don't want to take away the lunch of the consumers. That's what I care about. And so, what I'm trying to get at, at this hearing, is what your problem is here. And I think I've figured this thing out, but I'm going to ask Mr. Misener to help me in this, because I missed your presentation, and I want to give you a chance. So, I'm going to ask you this.

Now, what—the Verizon people are saying that the ISPs have no intention of adding any new charges to access the net. And when I said, "Great. Then why do you have a problem with net neutrality," they said, "Well, there are new services and there are new things, and, for those new things, that's different."

So, I guess my point is, I'm confused, because I've got a little—a wonderful chart here, drawn by my staff, about why you get paid, Mr. Tauke. What do you do that's so great that you get paid? Well, you got the public rights-of-way. Congratulations. But you have a definite, I think, responsibility, because you've got a lot of those rights-of-way. And then, you built the ability to transfer this information. For that, we thank you. That's important to us, that you did that. And that's what you get paid for.

So, I guess I'm confused why, when we say, "What's the problem with net neutrality," "Well, we have a problem, because—the other part of it, sure, that we won't discriminate, but this new"—the idea of taking different things and putting it on that same—you know, that same pipe—so, I mean, I'm confused about that. Why would they discriminate against the content? That's what I get—they're going to discriminate against the content and say, "One, we'll leave you alone, but the other one, we're going to have new charges." Something's wrong there, and I just wonder, Mr. Misener, what—how you see this.

Mr. MISENER. Thank you, Senator Boxer. I'll give it a shot. And I am sorry you missed my testimony. I did—

Senator BOXER. I know.

Mr. MISENER.—go through several myths—or, actually, misperceptions of fact.

Senator BOXER. Well, get to this one.

Mr. MISENER. Well, this one, Senator—

Senator BOXER. I think this is the nub of it. Because if—

Mr. MISENER. Thank you.

Senator BOXER.—they don't have a problem on people—that everyone's going to be treated the same if they just go to—try and access the Internet, but if it's a new service, then they're going to charge, how do they make this distinction? I don't get the distinction. If they're being paid for one thing, now why, all of a sudden, are they going to have different, you know, prices to do different things? That's what I want you to hone in on.

Mr. MISENER. I'll try, Senator.

When the CEOs talk about one or another content provider sitting on their pipes, it's a misperception of how the Internet works. Unlike cable and satellite, and broadcast and newspapers, all the other media that came before, which involves pushing the content out to the consumers, and then the consumer can choose what to read, which channel to select, all that content was in the pipeline already, and the consumer, at the end of the day, chose what they wanted to see.

The Internet is radically different, in that it is a pull technology. When the consumer gets online, they pull the information down. The Google home web page, the Amazon pages, don't ever enter the network unless a consumer asks it to be sent.

Senator BOXER. Very good point. That's a huge difference. And so, take it to the next step. Verizon tells us, today, they are now going to charge for that consumer making that decision to pull down other kinds of content. Is that right? That's what I heard.

Mr. COMSTOCK. Senator, if I might?

Senator BOXER. Yes.

Mr. TAUKE. Senator, no, that's not right.

Senator BOXER. So, you're not going to charge, no matter—you're not going to charge based on content, or what the content is.

Mr. TAUKE. If somebody's pulling down a website, no matter what it is—video, voice, data, whatever—via the Internet, we aren't planning to charge.

Senator BOXER. So, what are you going to charge for? What are you worried about that we're going to stop you from doing? Tell me, in plain English, so I understand.

Mr. TAUKE. OK. Let me use the example I used earlier, but I don't think you were here. You are a patient at Johns Hopkins University. You have heart surgery. When you leave the hospital, Johns Hopkins would like to monitor you at home. Or you are a diabetic patient, and they—and you have a medical center that wants to monitor you at home. What they want, oftentimes, is a managed network, or what we call a virtual private network, which we have many of today. That—and what the difference is between the Internet and a virtual private network is, the Internet is a network of networks, where there is no carrier—

Senator BOXER. OK, wait, wait. Just—I get you. You want to charge—when the guy when the guy goes home from the hospital, and the hospital wants to monitor him from home, you want to—

Mr. TAUKE. No.

Senator BOXER.—charge who for that?

Mr. TAUKE. The hospital. If the hospital wants to enter into an arrangement with us, not for Internet access, but for an end-to-end managed network, we would like to be able to offer that. Consumers can't get that today.

Senator BOXER. OK. And you will take the capacity, then, away from these other—

Mr. TAUKE. No.

Senator BOXER.—services? Or you're going to build new pipes—

Mr. TAUKE. Because we—

Senator BOXER.—for that?

Mr. TAUKE. Because we are putting fiber into the ground—this is the new network we're building—when you put fiber into the ground, you have virtually unlimited—

Senator BOXER. OK.

Mr. TAUKE.—capacity.

Senator BOXER. Well, could you do me the—could you—because we don't have time today—

Mr. TAUKE. Right.

Senator BOXER. I wish we had more time. It's so hard. This is so big. Write me the ten things you want to charge for. Let me take a look at that.

Mr. TAUKE. Well, it's really—

Senator BOXER. Maybe we don't—

Mr. TAUKE.—it's really—

Senator BOXER.—even have a fight. Maybe—

Mr. TAUKE. Yes, it's—

Senator BOXER.—maybe we can write a net neutrality bill that gives you the ability to do certain things. So, let's let—come forward and, instead of making these kind of statements that I read that I think get—raise a lot of questions in our mind, and, you know, sometimes these comments, maybe they were taken out of context. But they give me another message. Let me know, what are the things that you think you want to be able to charge for, additional charges. Let me take a look at what that is.

And I'd ask anybody else if they'd like to respond to—Mr. Misener, you want to—

Mr. MISENER. Yes, thank you, Senator. And one other question they might answer in this response is whether or not, for those

kinds of services, they would be offered on reasonable and non-discriminatory terms. It's one thing to want to provide Johns Hopkins a specialized-private service, but it's another thing to exclude, for example, the Mayo Clinic from the same terms. That would put Verizon in the position of being the new HMO.

Senator BOXER. We don't need that. That's a—we have too many HMOs.

Could I ask anybody else if they—Mr. Scott, could you—and Mr. Comstock, if you could—you see what I'm getting at. I'm trying to find some common ground here.

Mr. SCOTT. I, frankly, share your confusion when I hear, "We're not going to block, we're not going to degrade, we're not going to"—

Senator BOXER. Yes.

Mr. SCOTT.—"discriminate," but, "We don't want you to pass a law that would prevent us from blocking, degrading, and discriminating." Something is missing—

Senator BOXER. Agreed.

Mr. SCOTT.—between A and B.

Senator BOXER. Yes.

Mr. SCOTT. And I agree with Paul that it's great if we have new services on the Internet, provided that they are offered to everyone on the same terms.

Mr. COMSTOCK. I think, Senator, what it comes down to is, it's a fight over reserving capacity for their exclusive use. As Paul Misener was saying, they will decide which hospitals, or which other services get this special treatment, and—

Senator BOXER. Based on the bucks that are paid—

Mr. COMSTOCK. That's right.

Senator BOXER.—probably.

Mr. COMSTOCK. And they will always—I mean, this is how they can say both things and not be caught out—they will always make available some capacity that will be available on an unrestricted basis, but that's sort of like saying, "OK, with 395, we've got 8 lanes. We'll make one of those lanes available for everybody to exit Washington that wants to do it. You know, it's first come, first serve, best efforts. You all crowd your way down that. But we've got these other eight. And, by the way, we're taking five of those, and they're going to be our exclusive video content offering. So, it's all taken up with our video. Nobody else can put their video on it. And then we've got another two lanes that we're going to offer to people who want to pay more money, and we'll decide which of those people willing to pay more money will get to run on those extra two lanes." So, you know, you've got your—

Senator BOXER. It's like waiting to get on a highway, and—

Mr. COMSTOCK. Right.

Senator BOXER.—having the highway blocked.

Mr. COMSTOCK. There's a public road and a toll road—

Senator BOXER. Yes.

Mr. COMSTOCK.—and they—and it—

Senator BOXER. Right.

Mr. COMSTOCK.—it really comes down to—the difference with the common-carrier model was, whatever capacity was available—you couldn't force somebody to build new capacity, but whatever capac-

ity was available, you had to make available on a nondiscriminatory basis. So, if somebody wanted to come—a hospital or somebody else—and say, “Hey, I need this”—my companies provide VPNs every day. And so, it doesn’t have to be Verizon that does that. But we can only do those VPNs if we can get capacity that we need and resell it to the consumers—

Senator BOXER. Yes, I mean, I think there would be a huge outcry if somebody goes to a certain hospital, able to get a certain deal, and they—I mean, it’s a good point.

Did you want to say something, Mr. Tauke? Mr. Regan?

Mr. TAUKE. Yes. The fundamental issue here is, Are there—is there a limit on capacity? And I think it’s hard for us to grasp that in this new world there is really not a limit on capacity. If you purchase 30 or 50 or 70 megabits of Internet access from us, and we offer other services, that doesn’t cut down on the 30 megabits of service you have purchased as a consumer, or your ability to use that to get to the Internet. In the fiber world, you add electronics to the fiber in order to create additional capacity. So, whatever the consumer purchases from us in the way of capacity for access to the Internet, we want to sell them.

Senator BOXER. Well, the FCC says cable and phone companies have a 98 percent share of the broadband access market. So, we are dealing with a duopoly. And, in some cases in rural areas, only a monopoly. So, you’re—so, in terms of the capacity, it could be ever-increasing, but in—it’s who’s controlling the capacity, is what we’re coming down—

Mr. TAUKE. Well—

Senator BOXER.—to, at the end of the day. I don’t want to take up any more time, unless there’s someone who has a brilliant thing to say.

Mr. Regan, you have a brilliant thing to—

Mr. REGAN. I don’t think I have a brilliant thing to say—

Senator BOXER. Well, be brilliant—

Mr. REGAN.—Senator, but—

Senator BOXER. Think of the consumer.

Mr. REGAN.—I think you’re onto something, actually. I think you’re onto separating these things into two baskets. One is the consumer, the guy who buys Internet access from a carrier. What can they do? And I think what you’ll find here is a lot of consensus that they should be able to know what they’re buying, in terms of bandwidth and speed. They should be able to go wherever they want on the Internet, as long as it’s lawful. They should be able to apply the applications they want on the network, as long they don’t hurt anybody or hurt the network. And they should apply—be able to attach any devices to the network. Those are really good ideas, and I think you’re going to find everybody in agreement with them. And if you want to put them into law, we could talk about that.

Now, the next question is, What rights does a big company, who wants to buy—wants to buy a communications connection—not an Internet connection, but a communications connection—from their point-of-presence to something—to Mr. Tauke, and then from Mr. Tauke to someone else. These are two big companies talking to each other about a transaction. That’s a wholly different kettle of

fish. So, let's set up—separate them into two different baskets, because I think you're going to find a lot of consensus around consumers.

Senator BOXER. Yes, well, I don't see it as a different kettle of fish.

Mr. REGAN. OK.

Senator BOXER. I think you're making up a different kettle. But I'm willing to work with you on this.

Mr. Chairman, you've been so generous with the time. Thank you very much.

Senator INOUE. Thank you very much.

My only regret is that I've not been able to participate in this exchange in dialogue. But, if I may, I'd like to submit, to all of you, questions. And I hope you'll favor me with your responses.

Because of the importance of this issue before us—I think this is the most important issue; we have franchise and Universal Service Fund, but this is it—I would offer you an opportunity, if you wish to, to submit addendums, other statements, because you've heard your competitors come forth with their allegations and statements, and this may complete your presentation better.

So, with that, I thank all of you for joining us today, and the hearing will be in recess.

[Whereupon, at 1:25 p.m., the hearing was adjourned.]

A P P E N D I X

PREPARED STATEMENT OF HON. GORDON H. SMITH, U.S. SENATOR FROM OREGON

Thank you, Ranking Member Inouye and Senator McCain, for convening these hearings on telecommunications law reform and facilitating such a robust debate on what ails the Internet.

I have expressed before my concern over this net neutrality debate and its place in the broader consideration of telecommunications law reform. And I think it is important at this juncture for all of us to stop and reconsider our primary objectives in taking up telecom reform legislation.

In prioritizing the issues, I begin with the proposition that while there are many items included in the telecom reform bill there is one recurring theme that is present throughout—to enact legislation that will promote the expeditious deployment of affordable broadband services to all Americans.

Whether we are talking about updating our Universal Service rules to encourage deployment of these services to rural communities, allowing for the deployment of unlicensed broadband devices in spectrum not being used by television broadcasters, or updating our video franchising laws to accommodate the speedy entry of broadband-based video services to the marketplace—this legislation is purposefully and rightfully directed towards opening new markets for broadband services and encouraging competition in the marketplace to ensure that consumers pay a reasonable price for access to these new services.

Modernizing our telecom laws in ways that encourage the deployment of new telecommunications services to the marketplace also strengthens the long-term competitiveness and economic well-being of the United States.

We must therefore measure every proposed provision in telecom reform legislation against this backdrop and in so doing ask ourselves two questions. First, does the proposal at issue encourage or impede the deployment of broadband service. Second, how will the proposal at issue affect the cost of consumer broadband access.

I have heard again and again that any legislation that regulates the Internet at this point risks slowing broadband deployment and increasing the cost of consumer broadband access. I find it telling that I have not come across one salient argument that rebuts these suppositions.

The fact that we are spending what precious little time we have left this session discussing possible legislation that may, in fact, operate to frustrate the underlying objectives of telecom reform alarms me.

I urge my colleagues to think about what we are trying to accomplish with our telecom reform legislation, measure each proposal against this backdrop, and to keep their eyes on the ball when considering these important issues.

PREPARED STATEMENT OF DANIEL BRENNER, SENIOR VICE PRESIDENT OF LAW AND REGULATORY POLICY, NATIONAL CABLE & TELECOMMUNICATIONS ASSOCIATION

Chairman Stevens and Co-Chairman Inouye and members of the Committee, my name is Daniel Brenner and I serve as Senior Vice President of Law and Regulatory Policy at the National Cable & Telecommunications Association (NCTA), which is the principal trade association representing the cable industry in the United States. Its members include cable operators serving more than 90 percent of the Nation's cable television subscribers, as well as more than 200 cable programming networks. NCTA's members also include suppliers of equipment and services to the cable industry. The cable industry is the Nation's largest broadband provider of high-speed Internet access after investing \$100 billion over ten years to build out a two-way interactive network with fiber optic technology. Cable companies also provide state-of-the-art digital telephone service to millions of American consumers.

Thank you for inviting me to participate in this hearing in order to share the cable industry's view on legislation pending before this committee. The cable industry today fully embraces, and thrives in, a robust, competitive marketplace and our

consistent policy over several decades has been to minimize regulation on us and our competitors. The cable industry has never asked Congress for a handout and we don't seek to obtain regulatory advantages over our competitors. Nor have we opposed efforts designed to lighten regulatory burdens on our competitors in order to foster fair competition on a level playing field.

I would like to start this morning by addressing the so called "network neutrality" issue by making three key points.

First, Congress's policy of leaving the Internet unregulated has been a resounding success. The resulting *network flexibility* has encouraged billions of dollars in investment. Companies that include high speed Internet services among their offerings have the freedom to experiment with multiple business models, producing more choices and competition in content and providers for consumers, and more innovation than ever before.

Second, any change to this policy could have serious repercussions to continued network innovation and investment. Government, by its nature, is ill-equipped to make judgments about the best business models for an industry. This is especially true for a business as dynamic as the provision of high speed Internet services. It is clear that how those business models develop will directly affect the level of investment and innovation we can expect over the next few decades, but no one today can predict which business models will most effectively promote those goals.

Finally, in the absence of any problem calling for a legislative solution—and since the broadband services marketplace is characterized by robust competition—Congress should refrain from premature legislative action and allow the marketplace to continue to grow and change so network and applications providers can offer consumers the fullest range of innovative service options.

Congress's Decision To Leave the Internet Unregulated Is an Unquestioned Success

Keeping the Internet free of regulation has helped to spur tremendous investment and competition in broadband networks and services. Left free to create new business opportunities and services, broadband providers (including cable operators, DSL, satellite, and wireless operators) have invested billions of dollars to bring high-speed Internet access services to consumers across the Nation. With bandwidth usage growing at a rapid pace, continued investment will be needed to keep broadband services robust.

If broadband providers are to continue to make these investments, and if consumers are going to be given the levels of services and innovative new products and features they desire, all at prices they can afford, broadband providers need to have continuing flexibility to innovate in the business models and pricing plans they employ. Likewise, websites and content providers also need the flexibility to experiment with business models, and to partner with broadband providers in doing so.

Many so called "net neutrality" proposals, however, would seek to specify today which business models are permissible, and which ones are not, both for broadband providers and for website owners and content providers. They would impose by government fiat outcomes that are better left to the marketplace. This is especially so where that marketplace is highly competitive, where no real world problems needing a solution have been identified, and where the pace of technological development is breathtaking. There can be no better circumstances than these to leave it to the marketplace rather than government to be the regulator.

It is far too early for us—or you—to predict which business approaches will succeed in the long run. Any attempt to do so runs the unintended, but high, risk of promoting an approach that fails in the market. By the time the law catches up to the market, it will be too late to recapture the momentum that characterizes broadband today. The hands-off policy has given us the flexibility to innovate and respond to consumer demand. Abandonment of that policy will undermine—not promote—consumer choice.

Internet Regulation Will Direct Resources to Litigation, Not Innovation

Attempts to impose such requirements on broadband network providers also would lead to endless and expensive litigation. Even assuming appropriate regulations could be written—and because this is an area of rapid technological change, we do not think that assumption is warranted—they would still lead to uncertainty as to their actual application. They would also lead to the creation of a new bureaucracy to apply such rules and add layers of additional costs for dealing with the regulations and bureaucracy.

Such costs might be undertaken were there real world problems that needed government intervention to remedy. But again, where no one has yet identified such problems, where such regulations would likely increase costs and stifle innovation,

and where there is a vigorously competitive marketplace, there is no justification for taking such an enormous risk—and every reason not to.

S. 2686 Embodies the Right Approach

Cable strongly supports the approach of S. 2686, which requires the FCC to report annually to Congress on what is actually taking place in an extremely dynamic and evolving marketplace. The grave risks to innovation and investment posed by premature action in this field counsel strongly in favor of investigating *before* legislating, and regulating only in the face of real rather than speculative market failure. We believe that FCC oversight of the Internet access marketplace will confirm that there is no evidence of harm or market failure to justify what amounts to imposing common-carrier regulation on broadband service.

Interconnection Rules Must Be Retained and Applied on a Technology-Neutral Basis

I'd also like to take the opportunity today to address interconnection issues. Any bill that seeks to promote competition must address voice, as well as video, in order to ensure a true level playing field and sustainable competition. Cable today offers real, facilities-based competition to local telephone companies. Our competitive voice services, however, cannot survive without physical interconnection to the Bell-controlled public-switched telephone network (PSTN) at a fair and reasonable rate. Despite their claims that the phone market is "competitive," the Bells still serve the vast majority of Americans and still enjoy near-monopoly power in most markets in this country. In stark contrast to the purely speculative concerns raised by proponents of "net neutrality," there is decades worth of real evidence that the Bells will use their market power to stifle competitors in the markets for long distance, local, and telephone equipment.

Congress, in 1996, correctly recognized that the Bells' monopoly control over the PSTN, a network funded by rate payers, gave them the incentive and the ability to frustrate competition by impeding interconnection with other voice providers. This committee played a critical role in establishing a process to ensure that the Bell companies would interconnect with competitive local exchange carriers (CLECs), so that competitors could exchange traffic with the Bells on an economic basis, without glitches or delays, in order to promote local voice competition. These rights are critical to all competitors, including facilities-based competitors such as cable and cellular companies, because consumers simply won't buy a telephone service if they can't easily speak to friends and acquaintances served by the Bells.

Despite the interconnection rules enacted in 1996, ten years later the Bells still own the only ubiquitous phone network—serving 85 percent of the residential/small business market—and they still serve as the "hub" to which all other carriers must connect in order to reach each others' customers. And the Bells' continuing consolidation increases the need for interconnection protections. When the two largest CLECs in the market (AT&T and MCI) merged with the two largest Bells (SBC and Verizon), the most experienced and well-funded negotiators of interconnection agreements were removed from the competitive voice market. The proposed AT&T/BellSouth merger would only solidify the Bells' monopoly market power and make it more difficult for competitors to get a fair shake in interconnection negotiations.

Even as they buy their largest competitors and consolidate their market power, the Bells argue that these rules governing competition are no longer necessary and that their voice competitors should instead have to rely on commercial negotiations. In addition, some states and incumbent telephone companies are seeking to limit interconnection rights based only on the technology used by a voice provider. The Bells and incumbent telephone companies, however, have no incentive to enter reasonable commercial interconnection agreements with any potential competitor. Elimination of these rules or limiting them to providers of voice services using traditional technology will severely hamper the introduction of IP-enabled voice services—the best hope for competition in the voice market.

Just as the Bells continue to dominate the voice marketplace, they are often the only suppliers of the links that cable operators, wireless companies, and competitive local exchange carriers use to interconnect their networks with other providers. Wireless carriers also rely on the Bells for the landline trunks that tie cell sites to mobile switching offices. Whether these links are denominated as special access or transit services, they are critical inputs for Bell competitors. Unless there are effective measures to ensure cost-based pricing of these inputs, the Bells will be in a position to raise their rivals' costs and undermine competition. Simply put, you can't have facilities-based competition if competitors cannot reach their facilities.

Specific Comments on S. 2686

We support the technology-neutral intent of the interconnection provisions of the bill, which extend the rights, duties, and obligations of carriers under sections 251 and 252 of the Communications Act to VoIP service providers. However, we would suggest limiting these rights, duties, and obligations to *facilities-based* VoIP providers, who have made a commitment to deploying their own networks and infrastructure. A non-facilities-based provider should not have the right to order facilities-based entities on whose networks it rides to interconnect at a particular place or manner.

There are several other interconnection-related issues that the Committee should consider addressing in order to ensure that facilities-based competitors can compete fairly with the entrenched Bell monopolists and other incumbent carriers. First, we strongly urge the Committee to address rural telephone carriers' recent refusals to exchange VoIP traffic with telecommunications carriers, even though they have existing interconnection agreements with those carriers. Rural carriers' resistance on this point is depriving rural consumers of competitive voice services.

The bill should also ensure that incumbent local exchange carriers have a continuing responsibility to interconnect with other voice providers, regardless of whether the ILECs are reclassified as information service providers. Finally, as I explained above, the bill needs to include effective measures to ensure cost-based pricing for special access and transit services.

Conclusion

As Congress reviews the Telecommunications Act of 1996, we urge you to treat like services alike, preferably in a deregulatory environment. We will do the rest by raising private risk capital, investing in new technology, offering better customer service, creating innovative new programming, and competing with other multi-channel video providers in order to provide consumers with the best voice, video, and data services possible.

PREPARED STATEMENT OF STACI L. PIES, VICE PRESIDENT OF GOVERNMENTAL AND REGULATORY AFFAIRS, POINTONE; PRESIDENT, VON COALITION

Thank you, Chairman Stevens, Ranking Member Inouye, and members of the Committee. My name is Staci Pies. I am Vice President, Governmental and Regulatory Affairs of PointOne, a VoIP provider, and President of the Voice on The Net or VON Coalition—the voice for the VoIP industry. On behalf of the VON Coalition, I thank the Committee for the opportunity to testify on S. 2686, the Communications, Consumer's Choice and Broadband Deployment Act of 2006. This committee has led in facilitating the deployment of VoIP in recent years. Your actions to tread lightly when it comes to Internet regulation have helped enable the timely delivery of innovative, competitively-priced, voice services to Americans all over the country.

We are pleased to be here today to encourage this committee to continue to help unleash the full promise of Internet voice communications. With the right legal and regulatory framework, the potential for VoIP-led innovation is immense. Consumers throughout the country will be able to use VoIP to do things never thought possible, businesses may increase efficiency and productivity and transform the way they operate, and IP can help the economy to become an engine for innovation and the creation of higher-paying Information Age jobs.

Congress has an unparalleled opportunity to help launch a new era of broadband-enabled benefits. You can facilitate transformative improvements in the way we communicate that harness the power of the Internet. VoIP is not just another flavor of telephone service. In contrast to POTS, IP voice is an application, just like e-mail, streaming audio, streaming video, and web browsing. VoIP has the ability to decouple voice from the legacy copper telephone network, so that innovation can happen on Internet time, and consumers can connect from any broadband network. By transforming voice communications into a software application, VoIP can integrate communications and data in entirely new ways. Soon a voice component can be added to any type of device, application or service that uses a microprocessor or touches the Internet. Accelerating VoIP adoption can mean cost savings for consumers and businesses, reduced operational costs for providers, advanced features unavailable with traditional phones, increased competition among network and service providers, increased infrastructure investment, accelerated broadband deployment, improvements in emergency services, lower-cost communications for rural and government users, increased access for persons with disabilities, and increased worker productivity.

To accelerate these benefits, I wish to make three points about S. 2686 today. A more comprehensive response to your bill is submitted with our written testimony.

- First, rather than automatically applying yesterday's rules to tomorrow's technologies, the Committee should adopt forward looking approaches to VoIP that empower consumers, extend VoIP-driven benefits to rural Americans, and boost productivity in the economy.
- Second, to help accelerate the transition to a Nationwide broadband network, policymakers should adopt policies that create incentives rather than disincentives for exchanging traffic between Internet networks and the legacy phone network—thus geometrically increasing the value of both of America's communications networks. This means strengthening and reforming both interconnection and intercarrier compensation policies.
- And third, to ensure that every American can benefit from broadband communications choices, the VON Coalition supports modernizing our Universal Service system and encourages the Committee to establish a contribution approach that will be equitable, understandable, easy to administer and will ensure the sustainability of the Fund.

First, Congress should focus on accelerating VoIP-driven benefits to consumers, businesses, and the economy. Consumers and businesses are flocking to VoIP because it can do what Plain Old Telephone Service can—and much much more—at a competitive price. VoIP empowers consumers and businesses to manage proactively how they use communications services, including when and where they receive calls. With VoIP, a consumer can choose to direct work calls to their office or mobile phone, and personal calls to their home or mobile number, depending on the time of day. A VoIP consumer can specify in what order his several phones should be rung and can integrate voicemail, e-mail, instant messaging, and voice services in new ways—bringing the power of the Internet to voice communications. Indeed, VoIP is cutting phone bills by as much as 40 percent and enabling the kind of voice competition that this committee envisioned when it passed the 1996 Telecom Act. In some cases VoIP can replace a home or business phone system, in many other cases it is integrated into existing software applications, video games, and voice-recognition systems.

In the workplace, businesses, small and large, are tapping into VoIP for cost savings of 40 to 60 percent, and at the same time boosting productivity by as much as 15 percent through smarter communications systems. VoIP provides breakthrough new features that enable businesses to function more efficiently and respond more effectively to the needs of consumers. More Americans can now work from home, allowing businesses to home-source rather than outsource jobs. Importantly, the mobility features of VoIP empower businesses to maintain continuity in an outage or disaster where offices could be inaccessible, but employees will still need to communicate.

The government itself has been a successful early adopter of VoIP. Whether you are an astronaut on the Space Station, a researcher in the Antarctic, or a commander in Iraq—VoIP is helping our government do its job. That is why we commend you in this bill for ensuring that our armed forces serving abroad have affordable communications, and for recognizing the important role that VoIP is playing in keeping our troops in touch with their families.

Second, legislation enacted by Congress must help accelerate the transition to IP-enabled networks by removing interconnection barriers and modernizing old policies for the new world. We commend the Committee for ensuring that VoIP providers can interconnect with the PSTN to provide consumers with new voice alternatives. We suggest that language also be included to ensure that VoIP traffic can be exchanged with the PSTN regardless of the identity of the provider, or whether the VoIP provider partners with a CLEC to exchange the traffic. Such a provision would eliminate the threat to the competitive availability of VoIP services and avoid creation of a “digital divide” between those who can enjoy the benefits of VoIP and those who cannot.

As this committee has recognized, attention is also needed to speed *comprehensive* intercarrier compensation reform. To ensure that consumers and businesses can take advantage of this global medium that spans geographic boundaries, intercarrier compensation reform must speed the transition to broadband-enabled communications. IP networks and the gateways that enable the transition between broadband communications and the PSTN are critical links for empowering consumers and driving economic benefits. By focusing on overall, complete reform, in a timely fashion, you will ensure continued investment in IP-enabled networks, and avoid piecemeal decisions that can stifle innovation, technology investment, and

slow the transition to broadband communications. Piecemeal fixes and stand-alone decisions that only address a small subset of intercarrier compensation actually undermine the potential for comprehensive reform. For example, on the “phantom traffic” issue, we fully support the need to ensure that all providers pass without alteration the call identifying information they receive and that providers do not have to generate an originating telephone number if, due to technical infeasibility, there is not a traditional originating number used. This will facilitate the delivery of useful information to intermediate and terminating providers that may be used to determine the jurisdiction of calls. However, a broad range of parties have recognized that there is a difference between identifying traffic and deciding which intercarrier compensation charge applies. Addressing traffic identification by itself is only a half-measure. The only real solution is comprehensive intercarrier compensation reform that eliminates today’s artificial distinctions between different types of traffic, and puts Universal Service on a more stable footing than implicit subsidies through access charges. Accordingly, we recommend you provide the FCC a 180-day deadline by which to complete their long-pending intercarrier compensation item.

Third, we believe every American should have the opportunity to benefit from broadband-enabled voice services and we support the Committee’s efforts to expand broadband access nationwide as part of Universal Service. The VON Coalition has long supported modernization of the Universal Service Fund contribution methodology to move away from yesterday’s revenue-based system, to a broader connection or working telephone number-based contribution mechanism that is competitively and technologically neutral. There is a growing consensus that a revenues-based contribution methodology will not be sufficiently durable to withstand the broad transition to VoIP and other technological change. A revenue-based contribution methodology is inconsistent with other provisions in the bill directing Universal Service support to be sufficient and predictable. The bill’s provisions should also be modified to ensure the contribution mechanism is simple enough for the average consumer to understand, and to minimize transaction costs for consumers.

Another critical step for ensuring all Americans can take advantage of broadband enabled voice services is to accelerate E-911 solutions for the roughly 98 million—mostly rural—Americans who today are not able to take advantage of the breakthrough advantages of nomadic VoIP due to the lack of E-911 availability in their areas. We commend this committee for unanimously adopting VoIP E-911 legislation last year, including a prohibition on technology mandates, and believe that full Senate passage of S. 1063 is one of the most important policy issues for enabling consumer adoption of VoIP, especially in rural and underserved areas of the country.

In closing, the VON Coalition would again like to thank this committee for its leadership on VoIP. With continued leadership from this committee, we believe VoIP is positioned to help make communicating more affordable, businesses more productive, jobs more plentiful, the Internet more valuable, and Americans more safe and secure.

Thank you very much. I am happy to answer questions.

VON FEEDBACK ON S. 2686—COMMUNICATIONS, CONSUMER’S CHOICE,
AND BROADBAND DEPLOYMENT ACT OF 2006

[Additions to current language shown in brackets]

Title I War on Terrorism

SEC. 103. Telephone Rates for Members of Armed Forces Deployed Abroad

We commend the Chairman for the focus on ensuring our armed forces serving abroad have affordable communications to call home with, and the critical role that VoIP already plays in ensuring that our families can affordably stay in touch when asked to serve their country. Because of the importance of this provision, and the important and growing role that VoIP plays, we have suggested further improvements to the language to maximize the success of the provision—including language to make clear that the Commission can also abstain from adding new fees for members of the armed forces, ensures “implementation” of the provision, and suggests definitions for “calls”, and “VoIP service.” Language is suggested in the marked-up version of the bill.

SEC. 151. Interoperable Emergency Communications

IP-Enabled Voice communications—used today by FEMA, the Red Cross, DoD, the Army Corps of Engineers, and several State mobile emergency command centers for emergency communications—should be added to the section in order to ensure ro-

bust, redundant, and mobile communications in an emergency. Language is suggested in the marked-up version of the bill.

Title II Universal Service

Contribution Methodology—Ensuring USF Sustainability, Efficiency, and Clarity

The VON Coalition has long supported modernization of the Universal Service Fund contribution methodology to move away from yesterday's revenue-based system, to a more modern and broader connections or working telephone number based contribution mechanism that is competitively and technologically neutral. There is a growing consensus that a revenues-based contribution methodology will not be sufficiently durable to withstand the broad transition to VoIP and other technological change. A revenue-based contribution methodology is inconsistent with other provisions in the bill directing Universal Service support to be sufficient and predictable. Thus, preference should be given to a numbers or connections based methodology over the non-sustainable revenues based approach.

Section 211(d)(1)(B), should be further modified to ensure the contribution mechanism both minimizes transaction costs for consumers and is simple for consumers to understanding. Add new subsection (iii) as follows:

[(iii) designed to minimize transactions costs and facilitate easy consumer understanding.]

Low Volume User Clarity To Help Low-Income And Elderly

211(d)(1)(C)—Current language allows the Commission to “adjust the contribution for providers for their low-volume residential customers.” These low volume users are often more likely to be low-income or elderly. Language should be amended to explicitly exclude providers that recover less than a specific amount of combined communications service revenue per month from a particular low volume customer.

“(C) ADJUSTMENTS.—The Commission may adjust the contribution for providers [that recover less than a specific low amount of combined communications service revenue per month, as determined by the Commission,] for their low volume residential customers.”

De Minimis Exemption To Spur Entrepreneurial Endeavors

211(d)(2)(A)—The current language contains a *de minimis* exemption. Providers should be exempted that have minimal to non-existent revenues, even if the contribution methodology is based on connections. For example, if a providers revenues are *de minimis* and less than \$25,000 then subsection 54.708 of the CFR would be amended to exempt the provider. Such a change would enable start-ups, entrepreneurs, rural providers, and small businesses to enter the market without administrative burdens while trying to seed an early business.

“(A) if the services [or revenue from communications service] of such a provider are limited to such an extent that the level of its contributions would be de minimis; or

Other Identifier Protocol as Alternative to Working Numbers Is Problematic

211(d)(3)(A)(ii)—Remove “or other identifier protocol” from working numbers description. Such language would leave open the possibility that USF could be assessed on every IP, Instant Message, E-mail, or other address. It could lead to double payments for the same service, and would be difficult if not impossible to collect USF for a free service, or for services that are offshore.

Group Plan Discount—Ensure Families Who Use Multiple Numbers Can Stay in Touch

211(d)(3)(D)—In order to better stay in touch with children away at college, parents on fixed-incomes, or families and friends spread around the globe, consumers who use VoIP are often able to utilize more than one working telephone phone number for the same service. In order to ensure a fair and equitable contribution mechanism, these families should not be penalized by having to pay multiple times for the same service if a working telephone-number system is adopted.

“(D) GROUP PLAN DISCOUNT.—If the Commission utilizes a methodology under subparagraph (A) based in whole or in part on working phone numbers, it may provide a discount for up to 3 additional phones provided under a group or family pricing plan, [or for a service that utilizes up to 3 working phone numbers for a single voice service.]

SEC. 212(c)—Add VoIP to American Community Survey Questions

Add IP-Enabled Voice Service to study of broadband usage. There are reasons to believe VoIP is broadly used by Native Americans, but regulatory barriers may have left rural Americans without access to digital voice service.

SEC. 715. Rights and Obligations of IP-Enabled Voice Service Providers

Interconnection. We commend the Chairman for seeking to ensure that VoIP providers can interconnect and provide consumers with new voice competition. In order to avoid unintended consequences, the language should be focused on the same rights and obligations as a requesting telecommunications carrier under section 251(a)–(c) and 252—currently it is 251 and 252. Like the House COPE bill, the Committee should also include language to ensure that VoIP originated traffic can be exchanged with an incumbent local exchange carrier regardless of the classification of the provider originating such traffic or whether a competitive local exchange carrier is used to exchange the traffic.

Disability Access. We commend the Chairman for seeking to ensure that all Americans, including those with disabilities, can take advantage of the lower prices, improved features, and new competition that VoIP can deliver. We note that (1) the FCC already has a regulatory proceeding underway (the IP-Enabled Services NPRM) to determine the appropriate disability rules for VoIP, and (2) the Commission already has authority under Title I to apply disability rules to information services like VoIP. To the extent that Congress wants to take action, we suggest edits to provide consistency with the House-passed version, and to ensure that both services and hardware meet disability needs.

Definition of IP Enabled Voice Service. The definition should be updated to be consistent with the definition adopted in the House COPE bill by including line powered VoIP services. The definition should include the language: “(including when the voice communication is converted to or from TCP/IP protocol by the VoIP service provider and transmitted to the subscriber without use of circuit switching).” In addition, the definition should conform to other two-way IP-enabled voice service definitions—especially since the stated goal is to cover services “marketed as a substitute for telecommunications service.”

Add language supporting exclusive Federal jurisdiction for VoIP. Congress should embrace the unique nature of IP communications, by codifying the FCC’s Vonage decision to assert exclusive but limited Federal jurisdiction over VoIP. It would merely continue the status quo. VoIP relies on technology that seamlessly spans international borders, and does not distinguish between geographic boundaries—making it impossible to determine geographic endpoints. This global technology is impossible to regulate at the State level and even challenging at the Federal level. Therefore, without a clear Federal policy framework for VoIP, future investment in this area is threatened, putting at unnecessary risk the reduced costs and greater functionality of VoIP-based services that could otherwise be made available nationwide. For these very reasons, the FCC, in its landmark Vonage decision, wisely avoided the morass of 50 separate State regulatory frameworks, and asserted exclusive but limited Federal jurisdiction over VoIP.

Sec 251—Applaud the Bill’s Commitment to Broadband Build-out and Services

The VON Coalition commends the Chairman for working to ensure that every American has access to broadband service. For Americans to benefit from the lower costs, news services, and advanced features that VoIP can deliver, they need access to affordable broadband service. VoIP itself may be the long awaited killer-app for increasing broadband demand and driving broadband deployment. VoIP will play an essential role in driving this deployment and helping the Committee reach its goal.

Sec 255—Phantom Traffic

We have make several recommended changes to the language which:

1. Eliminates broad unintended consequences that would have occurred if broadband routers were required to be able to identify calling and called parties.
2. Clarifies that providers do not have to generate an originating telephone number if, due to technical infeasibility, there isn’t a traditional originating number used.
3. Ensures that originating signaling information that is received by provider is passed through without alteration. This will facilitate the delivery of useful information to intermediate and terminating providers that may be used to determine the jurisdiction of calls.

4. Enables the FCC to move quickly to enact clear and enforceable labeling and routing rules for traffic exchanged on the PSTN
5. Avoids inadvertently addressing traffic containing correct information, yet carriers dispute appropriate rate based on differing interpretations of existing FCC rules, or traffic without correct signaling because of limitations of the network technology in use (USTA has suggested that both types of traffic are not “phantom traffic” issues.)

Congress should also encourage swift and comprehensive Intercarrier Compensation Reform. Rather than simply trying to impose yesterday’s legacy rules on new IP-based technologies, Congress should promote swift and comprehensive reform to establish a uniform national intercarrier compensation regime that is geographically neutral and eliminates implicit subsidies. The current patchwork of compensation rules provides few incentives for providing services in the most economically efficient manner and prevents consumers from making economically rational purchasing decisions. Congress should require the FCC to act on intercarrier compensation reform within 180 days of enactment of a bill.

Title VI—Wireless Innovation Networks

The VON Coalition commends the Chairman for working to ensure that every American has access to broadband service, and freeing spectrum in order to expand access to broadband. For Americans to benefit from the lower costs, news services, and advanced features that VoIP can deliver, they need access to affordable broadband service. VoIP itself may be the long-awaited killer-app for increasing broadband demand and driving broadband deployment. VoIP will play an essential role in driving this deployment and helping the Committee reach its goal.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JIM DEMINT

Question. Since many of the concerns raised by advocates of net neutrality are hypothetical, let me ask all of you a hypothetical question. Suppose that a new competitor who wanted to enter the broadband market to compete against the phone and cable companies and even satellite. And suppose that this new company made a deal with a VoIP provider and a video provider to let it be the *exclusive* provider in its category. And suppose that in exchange, the new competitor got large upfront payments that allowed it to widely deploy this new network. Would you ban these companies from making this deal and bringing a new broadband network to the market? Wouldn’t banning these types of agreements be bad for *consumers*?

Answer from Timothy J. Regan. I would not ban the hypothetical arrangement described in this question because the arrangement would promote both network investment and competition. I believe that banning such an arrangement would be harmful to the interest of consumers and to the public interest in general.

Answer from Roger J. Cochetti. As we indicated in our testimony, CompTIA’s members strongly believe that government policies should be designed to promote competition in the provision of broadband access services and this competition will both reduce the need for any governmental regulation and deliver important benefits to business and individual consumers alike. Although it is difficult to comment with exactness on this hypothetical example, since some important details are not provided, we can say that existing anti-trust and consumer protection rules should be applied to the provision of broadband services and that the Federal Government should adopt a posture that encourages new broadband service providers to enter the market.

Answer from Paul Misener. We believe that the Internet has been an engine of economic growth and a vibrant platform for innovation and competition because of its open architecture.

We are not opposed to exclusive arrangements in a competitive marketplace. But, as much as we wish it were otherwise, in the marketplace of today, consumers have little or no real choice of broadband Internet access and what exists for the vast majority of Americans is, at best, a duopoly of the local phone and cable companies.

Absent strong network neutrality provisions, we fear that consumers will no longer have the freedom to choose content from thousands of sources on an open Internet. Instead, the Internet will move backwards significantly with fewer options and limited choices. Not only would that negatively impact consumer choice and competition for online services, but it would be a drag on American innovation and U.S. global Internet competitiveness.

Answer from Ben Scott. As a consumer advocate, I take very seriously any opportunity to lower prices and improve the quality and quantity of choices in the communications marketplace. This hypothetical scenario, like many that have been

imagined during the debate over network neutrality, holds a significant degree of appeal. However, in each case, the final analysis reveals that permitting this brand of discrimination yields a short-term benefit but causes long-term harm.

The nondiscrimination principles separating the physical layer of the network from the content layer of the network have long been the foundation of communications law. These fundamental marketplace protections have produced very favorable results for consumers—most notably the Internet, the greatest engine of economic growth and democratic communications in modern history. The VoIP market is an exciting one for consumers because it brings the possibility of numerous dial tone providers competing for their business over a single broadband connection. The appeal of choice and the power of the free market to discipline prices and drive quality of service improvements is a powerful endorsement of the network neutrality rules that have long governed the Internet.

But nondiscrimination principles apply in many other areas. For example, access on equal terms is also the baseline guarantee of the program access rules that prohibit anti-competitive activity in the distribution of video programming by cable operators. Without these rules, no competitive cable or satellite operator would be able to attract a mass audience because the incumbent operator would have the power to make exclusive deals with programmers. Without the program access rules, satellite television would not have captured the market share that it has. Without these rules, the telephone companies could not successfully enter the multi-channel video market.

In short, the temptation to permit exclusive deals to new entrants into the wireline triple play market may be attractive, but it is not worth jeopardizing level-playing field rules of nondiscrimination that protect competition in the realm of content and applications that flow over the networks. Further, I question whether this situation would actually be economically and legally feasible. Exclusive deals with a single VoIP and video programmer would not likely generate the kind of revenues necessary to over-build a new wireline infrastructure. That volume of revenues would need to come from a sizeable capture of market share. To capture those customers, the new entrant would need to maximize its available service and content choices. (Exclusive deals are only economically beneficial if a network operator already has market power.) If the premise of its entry in the market was exclusive programming deals that minimized competition and consumer choice in VoIP and video, that would mitigate against a successful marketing strategy to customers. Moreover, such a scenario would require not only violating network neutrality in the VoIP market, but also the program access rules in the video market. The impact on the incumbent providers would likely provoke a severe reaction, both in the marketplace and in the courts.

At the end of the day, consumer benefit is greatest when each of the network providers in the voice and video market have the maximum number of consumer choices. Permitting exclusive deals would create private networks which offered a limited selection of content and services. This path does not appear to be in the economic interests of the consumer in the long term.

Answer from Earl W. Comstock. First and foremost, let me state for the record that the concerns expressed by Net neutrality advocates, and in particular COMPTEL members, are not hypothetical. Protracted negotiations with the Bell companies and other incumbent local exchange carriers (ILECs) over interconnection and other services that ILECs are required to provide by law, as well as the anti-competitive contract provisions that Bell companies routinely include in their contracts for services like special access that the FCC has chosen to deregulate, demonstrate on an ongoing basis that the core Net neutrality concerns regarding discrimination and refusals-to-deal are well-founded and occurring today. Similar behavior by incumbent cable operators, and the draft bill's inclusion of language to require incumbent cable operators to provide access to video programming, confirm that discriminatory and exclusionary behavior is not limited to the Bells, or subject to correction by market forces.

Turning now to the hypothetical question you pose. A fundamental, but unstated, premise of the proposed hypothetical must be that the new company and the phone, cable, and satellite operators are using some public property in order to construct and operate their networks. Today, virtually all network operators offering services to other parties use public rights-of-way, public spectrum, or some combination of both. This assumption is a critical predicate to the hypothetical, because it is only this premise that gives the hypothetical relevance for a public policy debate. Without recognition that network operators are using public property to provide their commercial services, there is no legitimate, corresponding expectation that the networks be used to provide some public benefit. Instead, the point of the hypothetical could easily become an abstract discussion of whether rules are necessary to prevent

uneconomic investment by private parties using their own resources. In other words, without the use of public resources by network owners, the hypothetical is as meaningless as whether the public has an interest in whether a private citizen can allow anyone, or prevent anyone, from using a facility built on their private property. For example, if a person builds a golf course in his back yard, and then refuses to allow anyone to use the golf course, is the public interest affected? Of course not; it is only because every network operator uses public property to build its network and offer its services that the public is entitled to the expectation that the investment—using the public resources—should produce a public benefit. With this implicit assumption in mind, let us now turn to the hypothetical.

The hypothetical assumes that at least two network operators (the phone and cable companies, and perhaps satellite) are already supplying the entire market with voice and video service. Regardless of how it is financed, a third network will not benefit consumers—or the new network operator—unless the new network provides better voice (using VoIP) and video services to enough consumers to justify the cost of building the new network. In other words, in order to benefit consumers, the new network operator must offer voice and video services *in competition with* the existing voice and video services offered by the other network operators.

However, the owner of a new network would only benefit from offering a brand new voice or video product on an exclusive basis, if the new network owner could be certain that offering these voice and video products on an exclusive basis would increase its sales to a point sufficient to pay for the network. Without that certainty, then the new network operator would be increasing its risk by entering into exclusive agreements because those agreements would prevent the new network operator from signing up additional subscribers who wish to use other voice or video providers. As a result, a network operator would be unlikely to offer only one new voice and one new video product, unless these products were clearly superior to the voice (whether VoIP or traditional) and video products available from the other network operators. If the VoIP or video service is not superior to the competing products offered by the incumbents, then the new network operator has almost no chance of competing in the market. Thus, a network operator deciding to build a new network to offer only one voice and one video service is making a riskier bet, because the operator must now have (1) the most efficient network—starting with no customers, (2) a better voice product than its competitors, and (3) a better video product than its competitors.

Consumers only benefit under the hypothetical if the exclusive VoIP and video services offered by the new company are better than those available on existing networks or result in more competitive pricing among similar services. If the VoIP or video services being offered under the exclusive arrangement are so superior to existing services that offering customers these services would increase the new network's profits faster than would otherwise be the case, it is difficult to understand why the VoIP or video service provider would pay the new network operator to carry these services, when the network operator already has an independent incentive to carry the services in order to increase subscribers faster than the new operator otherwise would be able to on its own. Further, unless the VoIP service provider or video service provider that is seeking the exclusive contract is seeking to protect its existing market share, it is not clear why the superior VoIP or video service provider would want to limit its own profits to those that they can generate on a new company network, when it could likely increase its profit far more—and faster—by selling its service to all network operators.

It is much easier to understand why a VoIP or video service that is already the dominant voice or video service on the incumbent networks would pay for exclusivity on a hypothetical new network. The “payment” for exclusivity—or the right to ensure that rivals cannot offer a competitive VoIP or video product—is only likely to be valuable to a VoIP or video provider that is already dominant. In this case, the “payment” to the new network builder to ensure that the dominant VoIP/video service provider does not face competition is simply a way of ensuring the monopoly profits that the dominant provider already enjoys, will not be threatened by the construction of the new network. In this case, competition in the VoIP and video markets is thwarted by the exclusivity contracts. This is precisely the concern that Net neutrality advocates are raising; consumers would be harmed by the reduction in competition (as well as being burdened with additional costs to pay for the new network), and, thus, it is hard to see how consumers would be harmed by making such conduct illegal.

In summary, the hypothetical is unrealistic. In order to have the capital to make the “large upfront payments” to the new network operator to build its network, the VoIP or video service provider would have to already be well established in the VoIP or video market. If the VoIP or video service provider is dominant, then that pro-

vider would lose market share if they limit their service offering to the new network operator, who starts with no market share. If that is not the case (for example, if a well-funded company wants to enter the VoIP or video market), then that new entrant risks limiting their own growth and profit by limiting their service offering to one network—it is much less risky to offer their service over all networks. Since a dominant VoIP or video service provider will clearly not enter into a contract that would reduce its market share, and a new entrant in the VoIP or video service market is unlikely to be well-funded enough or willing to limit its own growth to that of the new network operator, then the hypothetical must assume that the real driver behind the exclusive contract is an action by the VoIP or video service provider to protect their existing dominant market share by excluding rival VoIP and video service providers. Allowing such contracts necessarily moots the consumer benefit—competition in the provision of services over that network to provide lower prices and greater choice—and in fact results in increased cost to the consumer, who must pay for the new network or see the public resource wasted. The hypothetical incorrectly suggests that there is a benefit to consumers simply by having another network constructed, even though that new network is unavailable to provide competitive choice to consumers because incumbent VoIP or video service providers can control the new network through the use of exclusive contracts to finance its construction. In that case, it is difficult to see how the existence of the new network benefits consumers at all.

Answer from Hon. Tom Tauke. I agree that consumers would be harmed by prohibiting the new broadband provider from entering into these arrangements. As a general matter, broadband providers or any other providers in the competitive Internet space should be permitted to reach commercial agreements to offer differentiated services, so long as customers are adequately notified of the limitations and price of their service. If customers are dissatisfied with the service offering, they will choose a different provider.

Question for Earl W. Comstock

Question. How many facilities based carriers does COMPTTEL have? Do these facilities-based carriers support your position on Net neutrality?

Answer. COMPTTEL has 146 voting members who are facilities-based carriers. The COMPTTEL membership supports the net neutrality position outlined in my testimony. Like all membership organizations, COMPTTEL positions are arrived at through discussion among members. Each individual COMPTTEL member is free to support or oppose any particular position adopted by the membership as a whole.

Questions for Hon. Tom Tauke

Question 1. Mr. Tauke, in a previous hearing, we heard from a Wall Street analyst who said that imposing net neutrality regulations, similar to the ones contemplated by some of my colleagues, would further sour Wall Street's view of network providers. What is your reaction to this?

Answer. Building the next generation of our Nation's communications infrastructure is risky business, as the analysts have told you, and continue to tell us. Verizon is investing our shareholders' and bondholders' capital in a massive deployment of fiber optic cable in order to bring our customers competitive choice in video services, blazingly fast high speed Internet access, and world class telephony service.

We agree that intrusive government regulation aimed at hypothetical problems—such as many of the Internet regulation proposals being put forth in the name of “net neutrality”—could impact investment in broadband. Government policies should be encouraging broadband network deployment and competition, not discouraging it. We need the freedom to provide the Internet of the future to best meet our customers' needs.

Question 2. Mr. Tauke, we have heard a lot about the “rights” of companies like Microsoft and Google to have access to the fiber networks you are building. Isn't this essentially common carrier regulation? Can you tell me if there are any differences between the reasons local phone companies have traditionally been saddled with common carrier obligations and the obligation Google, Microsoft and others wish to foster on to the Internet through what they call “net neutrality?”

Answer. Common carriage obligations—including nondiscrimination requirements—were originally imposed in a monopoly environment and have no place in the competitive marketplace for broadband services. Throughout the United States, there are multiple competitors providing broadband Internet access using different technological platforms: copper, fiber, coax, mobile wireless, fixed wireless (Wi-Fi and Wi-Max), and powerlines. Imposing the “old world” rules on this dynamic marketplace will harm the very consumers such rules are ostensibly intended to protect.

Although “nondiscrimination” obligations may at first blush sound unobjectionable, they are, for good reason, very much the exception rather than the rule in the context of commercial agreements. In fact, most forms of product or service differentiation or customization require some level of “discrimination,” but these innovations—and the consumer benefits they provide—may be prohibited by strict “nondiscrimination” obligations. The nondiscrimination requirements proposed by Senators Snowe, Dorgan, and Wyden could be read to prohibit all broadband providers—regardless of their platform—from differentiating their service offerings to provide more bandwidth, or security, or speed for certain applications, such as telemedicine, distance learning, or online entertainment. For example, content or application providers, citing these obligations, could ask regulators to prohibit a network operator not only from offering higher quality-of-service to a consortium of hospitals for the transfer of medical images than to an ISP to transmit e-mails, but also from charging for this higher quality-of-service.

Even if nondiscrimination obligations are not interpreted to prohibit all differentiation of services, the existence of these or other common carrier obligations opens the door to intrusive regulation that denies providers flexibility, makes it more difficult for them to compete, and discourages innovation. For example, common carriage regulation on telecom services often imposed tariffing obligations on providers that required them to make cost-based justifications for their prices. These requirements also prohibited a provider from offering a service to anyone, unless it agreed to offer the service to all takers on the same terms—regardless of whether the takers were similarly situated. While these requirements might have been appropriate in a monopoly environment for a very limited set of static, voice services, they are completely inappropriate—and harmful—in the competitive, dynamic broadband environment.

If such regulations were on the books, competing content or application providers would enlist regulators to tell broadband providers how to structure their broadband offerings, and what prices to charge, notwithstanding the existence of competitive alternatives for broadband services. Regulators could become engaged in endless proceedings to determine the extent to which broadband providers can differentiate their services and prices. There are simply too many broadband services, too many broadband platforms and networks, and too many network operators for the FCC to be able to efficiently determine what kind of differentiation is acceptable.

Question 3. Mr. Tauke, if we established net neutrality regulations for all platforms—wireless, satellite as well as telephone and cable—what would be the effect on these competitive platforms’ development and what effect would it have on the emergence of competition for access to content from various platforms?

Answer. “Net neutrality” legislation would significantly slow the investment in, and deployment of, all types of next-generation broadband networks needed to offer new, high-speed Internet access services and competitive video services to consumers.

Regulators have long recognized that imposing nondiscrimination and other common-carriage regulation on entities lacking market power can harm consumers by slowing “the introduction of new services, dampening competitive responses and ultimately encouraging price collusion through the forced publication of charges.”¹ That would certainly be the effect of imposing nondiscrimination rules on any broadband platform, whether copper, fiber, coax, mobile wireless, fixed wireless (Wi-Fi and Wi-Max), powerlines, or some future technology.

Rather than attack hypothetical problems by imposing heavy-handed regulation on competitive broadband networks and services, government at all levels should be looking for ways to incent investment in our Nation’s broadband infrastructure. The experience with wireless networks, which have gone from zero customers to hundreds of millions of users in twenty years, demonstrates that rapid growth and consumer value are created when government steps aside and lets the market work. The same light-touch approach to regulation of broadband networks will extend similar benefits to all Americans.



¹*Policy and Rules Concerning Rates for Competitive Common-Carrier Services and Facilities Authorizations Therefor*, Further Notice of Proposed Rulemaking, 84 F.C.C.2d 445, ¶68 (1981).