# **The Free State Foundation**

A Free Market Think Tank For Maryland...Because Ideas Matter

# **Annual Winter Telecom Policy Conference**

National Press Club January 29, 2010

Transcript of the Proceedings
Net Neutrality Regulation: Why Now – Or Ever?

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Moderator

# PROCEEDINGS<sup>1</sup>

MR. MAY: Okay, I'd like to ask everyone to take their seats.

While you're doing that, just a couple of housekeeping matters. Again, for those of you that came late, welcome to the Free State Foundation Conference.

Immediately after this session is over, we're going to move next door to my right for the lunch session and as you know, during that session, I'm going to have a conversation with Eddie Lazarus, the FCC's chief of staff.

I know some of you were here last year when I had a similar conversation with Blair Levin and that was rather fun. I am absolutely sure that this one's going to be fun as well, in addition to being informative, I hope.

Now, just one other thing I'll mention. There are just a few left because I only brought a few, but I've got some copies out on the table of the book, "New Directions in Communications Policy," which came out a few months ago from Carolina Academic Press. This is a collection of essays all by Free State Foundation distinguished scholars, members of our advisory board. And this book is on sale for today only for \$12. Normally, I think \$23.

Okay, we're going to get started. Here's what one of our Founding Fathers had to say about net neutrality -- no, it's true. This is a direct quote: "What prudent

<sup>1</sup> This transcript has been edited for purposes of correcting obvious syntax, grammar, and punctuation errors, and eliminating redundancy. None of the meaning was changed in doing so. The editing assistance of FSF Research Assistant Cody Williams is gratefully acknowledged.

merchant will hazard his fortunes in any new branch of commerce when he knows not but his plans may be rendered unlawful before they may be executed?"

Well, that was James Madison in Federalist Number 62, but I think that question -- or at least we're going to explore whether there's a net neutrality angle in there in that quote and see whether Madison's question has any relevance at all.

But if it doesn't, or if that's too difficult, the title of this panel is much more simple and I think that will do for starters. And that title is: "Net Neutrality: Why Now or Why Ever?"

Now, we're going to dive right in. I've asked the panelists to take five minutes initially and some of them have been on our panels before and they know that I will enforce that limit pretty strictly. And then after their initial presentations, I know we'll have a good back and forth.

Now, I'm going to introduce the panels just by giving a one sentence or maybe possibly slip into two sentences of their bio. You all have the conference booklet and that has more information, but I'm going to do the quick and dirty so to speak. And I'm going to introduce them in the order that I'd like for them to speak. So they have to pay attention to these introductions.

Our first speaker, and this is the only change for the whole conference, is not Alan Davidson from Google. It's Rick Whitt, an old colleague of mine as many of you know, who is Google's Washington telecom and media counsel.

I found out yesterday that -- I got a message from Alan Davidson and it

said that he had to be occupied with the China situation. I don't know what that means, but anyway, he's tending to that.

The second speaker will be Kyle McSlarrow. Kyle, of course, is president and CEO of the National Cable and Telecommunications Association. He's the primary public policy advocate in Washington, of course, representing the cable industry's interests.

Following Kyle will be -- I've got to make sure I get this right, too. It will be Tom Tauke. Tom, of course, is executive vice president, public affairs policy and communications. In that capacity, Tom Tauke oversees media relations, employee communications, philanthropy, corporate responsibility and external relations and, of course, public policy, for our purposes, here today.

Fourth, we're going to go to Robert Atkinson. Rob is founder and president of the Information Technology and Innovation Foundation. And he's also a nonresident senior fellow at the Brookings Institution.

Fifth, let's hear from Christopher Yoo. Christopher is a professor of law and communication and director of the Center for Technology Innovation and Competition at the University of Pennsylvania.

If I didn't mention it before, I should tell you Christopher has a very, I think, important and useful essay in this book, again, which is on sale out front at the desk for \$12.

And then finally, we've got Howard Shelanski from the Federal Trade

Commission. Howard is deputy director for antitrust of the Bureau of Economics at the FTC.

Again, all of these speakers, as you know, have very distinguished resumes. There's a lot more that could be said, but just refer to your program. So with that, I'm going to turn to Rick Whitt to open it up for five minutes. Rick?

## PRESENTATIONS BY PANELISTS

## PRESENTATION BY RICK WHITT

MR. WHITT: Thanks, Randy.

And good morning everybody. My boss, Alan Davidson, does send his regrets. There aren't too many things to which a Free State Foundation appearance would end up in second place, but I think dealing with China is one of them. So I do send his regrets.

I think it would be instructive to briefly summarize how we got here. At least from the perspective of a web-based apps company from Silicon Valley. And for that, I go back to the year 2005. It was a pivotal year in this debate.

The Commission had decided the Madison River VoIP Blocking case the previous year under the preexisting policy regime under which broadband was still seen as a telecom service, and there was near-universal applause in terms of the outcome there.

But in June 2005 came, of course, the Supreme Court's *Brand X* decision.

As Justice Scalia put it in his dissent, it was a wonderful illustration of how an expert agency can turn statutory constraints into bureaucratic discretion.

A few months later in the wireline broadband order, of course, the

Commission then eliminated the statutory and common law bases for common carriage,
as applied to wireline broadband.

So the ISP open access regime effectively was ended. The Commission did issue the Internet policy statement at that same time, but they took, in our mind, a consumer-centric only approach, ignoring the potential for discrimination by broadband providers against the rest of the Internet of unaffiliated content and apps providers.

And so, by the end of the summer, we had enforceable safeguards that had now become unenforceable and incomplete principles.

Soon after that, we started hearing some ominous rumblings from our broadband provider friends. Ed Whitacre, then of SBC, now the head of Government Motors, said he would not let Google or others use his pipes for free.

A few months later, John Thorne of Verizon said in an unfortunate remark at a lunch that was later, I think, disowned by Verizon, that Google is enjoying a free lunch that should, by any rational account, be the lunch of the facilities providers.

We also heard similar statements from BellSouth, French Telecom, and Deutsche Telecom. And so, at that point, what was a group of Silicon Valley companies and public interest groups to do?

The natural course for us was to go to Congress. Or to paraphrase Janis Joplin, network neutrality is just another name for nothing left to lose.

So in early 2006, there was a cable franchise bill that was, pending in Congress; actually moving in Congress. And we decided to try to use that as the platform for seeking an amendment that would require nondiscrimination.

So a policy dispute became, at that point, largely a political one and then to my mind, unfortunately, a partisan one and the battle lines were drawn. So now we fast forward to 2010. We now have a president who ran on a broadband openness agenda as part of his high-tech platform and we now have an FCC chairman who wants to put that into place.

In my view, a large part of what separates the broadband providers from the Internet apps community is a difference in mindsets. For example, we see the desirability of protecting the smart edges. They fear being consigned to dumb cores. Where we see the prevalence and the power of end-to-end, they see all of the many exceptions.

Where they see undifferentiated ecosystems, we see network layers or, as Randy likes to call it, techno-functional analysis. The challenge is whether anyone's mind actually can be changed in this debate, or can we at least have a reasoned debate despite these differences.

So in that spirit, we reached out to Comcast behind the scenes as the BitTorrent situation was first coming to light back in 2007. Rather than assume the

worst in an adversarial posture at the Commission, we actually decided to talk.

Our engineering level discussions led us to conclude that Comcast was engaging in rather inelegant network management and not anticompetitive blocking. So we refrained from piling on at the FCC.

In that same spirit, our recent work with Verizon has been the culmination of an extended exercise in trying to understand each other and find some common ground in this area.

From Google's perspective, especially given where we started from, we've achieved some success here. We've been able to find some fundamental things to agree on, like maintaining open and robust access to the Internet, preserving incentives for all players in the ecosystem to invest, ensuring transparency for users, and finding a tailored role for government to deal with bad practices that harm users in competition.

At the same time, we've also respectfully disagreed about some of the central questions around broadband openness, like whether a nondiscrimination rule is even necessary, and what it should look like, or whether wireless networks should be included in the mix, and even whether the FCC has the authority to do anything at all.

Where we go from here remains to be seen, but it's my own belief that stakeholders in the Internet's future need to keep talking with each other -- and not at each other.

So to finally address the title of this panel, the Google comments we

submit in the proceeding speak for themselves in terms of the structural market and technical reasons we see for the FCC to use its oversight authority to preserve and promote broadband openness.

And I look forward to getting in at some of those questions and arguments stemming from the debate as part of this panel. Thanks.

MR. MAY: Rick, thank you very much. And I should say to all the panelists, I've told Rick that after we finish the initial presentations, I'm going to give him a couple minutes to respond and every panelist will then have a chance to take a minute or so to respond to other panelists. And then, of course, I want all of you in the audience to think of questions because we're going to try and save some time for a few audience questions as well.

With that, Kyle, please.

#### PRESENATION OF KYLE MCSLARROW

MR. MCSLARROW: Thank you, Randy, and good morning to everybody.

Sometime last fall, a reporter told me that they'd gone back and looked at all the hearings that were either on net neutrality or in which net neutrality was raised and I had the distinction -- the dubious distinction of having been the person to testify the most often on this god-awful subject. So trying to say something new is really tough.

So if you'll indulge me, let me just stipulate that I've given you remarks that include phrases like, a solution in search of a problem, investment and innovation, a cautionary principle, and first do no harm.

I'm going to go in a little different direction and really play off something that Rick was talking about and also engage in a little bit of history.

Early on in the net neutrality debate, which, of course, predated the telecom bill in 2006 when people were testifying about it, what you heard was that if you don't enact net neutrality rules, the Internet, as we know it, will end.

As far as I can tell, from that time, roughly 2002 forward, all that has happened is that broadband speeds have gotten faster. More applications have exploded. Google has continued to inexorably roll forward; a company that, and it sounds strange to even say this, actually delivered video using the U.S. Postal Service, managed to turn on a dime, and become a streamer of video over the Internet. And all of those hundreds of thousands of mobile applications that Commissioner McDowell and Steve Largent were talking about have come on the scene.

You fast-forward a few years later, and the debate began to shift. And increasingly in the last couple of years, what you heard was that this was all about the First Amendment.

And the charge was that unless you enacted net neutrality, First

Amendment rights would be violated, and important principles of free speech and
democratization would be eroded.

I gave a speech last fall to the Media Institute where I took that on and basically tried to remind people the First Amendment's actually a constraint on government action, not private action. I had the temerity to suggest that corporations actually had some free speech rights.

I didn't reach any conclusions. I simply said, I think there are free speech implications. I think it's fair to say I was scorched in the blogs after that and was reasonably pleased when I saw Professor Tribe file in the net neutrality rulemaking making all the same arguments, but actually reaching knowledgeable conclusions along the same lines.

And then of course I think *Citizens United* puts a complete period to the issue of whether corporations have some free speech rights.

Recently, Secretary Clinton gave, what I thought was an important and very thoughtful speech about government tyranny, internationally, and echoed Chairman Genachowski and I think that speech was an important speech, because it really represented over 200 years of a continuum of what's most important in our most important export -- which is democracy, respect for human dignity, and individual liberty. And the connection of the Internet and wireless and wireline broadband technologies and what it means to fight government tyranny was an important one.

But as a backdrop over the last year, you've continued to see a bit of a drumbeat where people are making a different connection where they're trying to connect the dots in a way where it's somewhat veiled.

In other ways it's very ham-handed where they make the connection that what's really going on here, and they cite China's oppression, Nazi Germany's repression, the crushing of dissidents in Iran recently; that somehow all of that is of a piece with whatever we're doing to manage our networks.

And on the one hand, you could dismiss all of this, and probably should, since it's a curious mix of the grotesque and the goofy, but at the same time, I think it's important for us to step back and realize that it's not helping this conversation much.

I think Chairman Genachowski was right to examine on how we reach and preserve a free and open Internet. I think he's right to have proceeding where we can all make our various cases and advocate for our views on all of this, but I also think we should have humility in this debate.

The fate of the republic is actually not at stake. Important telecommunications policies; important policies that effect every Americans are at stake and that should be enough.

But if we do it on that plane as opposed to the absurd, I think it makes it more likely that we can follow the lead of Google and Verizon and others who've tried to engage in a search for common ground.

MR. MAY: Thank you, Kyle. And next we'll hear from Tom Tauke.

#### PRESENTATION OF TOM TAUKE

MR. TAUKE: Thank you, Randy.

Occasionally in the midst of a swirling controversy, it's useful to step back and take a look at the surroundings. And in doing so, I find that there are three core questions defining this debate today.

The first question is, is there a problem? And if so, what is it? The second question is, what is the correct public policy for the Internet ecosystem? And the third is, how do you achieve such a policy under the current statute?

When it comes to the first question, it seems to me that the debate continues to rage, but interestingly, there is virtually no one who is contending that there is a problem now.

Instead, the debate is over whether or not actions taken by the government would prevent a problem in the future, or whether actions taken by the government would cause a problem in the future. But generally, the sense is there isn't a problem now. But either something bad could happen that the government should act to prevent or otherwise if government doesn't act or does act, it will cause something bad to happen.

The second question, what is the correct public policy for the Internet ecosystem; it seems to me that there is a remarkable amount of agreement and growing agreement.

There is a sense, I think, among all the players that it's in the interest for good actors in the space and for consumers in the space to have some government oversight to deal with bad actors in the Internet space. And so there is an understanding that this space which is becoming increasingly important to society should have some government oversight.

And there is some agreement on some core concepts relating to that government oversight. I think most now are reaching the conclusion that the consumer, the user, should be in charge. Therefore, they think there should be some transparency so consumers and users are well-informed.

Secondly, there is a growing agreement that there should be robust industry self-governance because of the rapidly moving nature of the Internet ecosystem.

Third, there is a sense that government intervention should be limited and I think there is even growing agreement on a test for government intervention. That test being A, consumer or user harm, or B, anticompetitive activity.

So I think there is growing agreement there -- around a potential policy for the Internet ecosystem.

Then we come to question three. How do you achieve this policy under current statutes? And here is where we run into deep trouble. There has been a tremendous amount of debate and controversy over this question in part because of the issue, who in the Internet space falls within the jurisdiction of the FCC?

When we start talking about that, the knives come out. I think it's fair to say that the reason that the knives come out is threefold.

One, there is a lot of concern about the nature of FCC regulation. The Title II- type regulation that Commissioner McDowell was talking about and other Internet regulation. That Internet regulation is frankly regulation of the past, and attempting to apply it to the Internet space causes a lot of concern.

The second factor is the unevenness of regulation because the statutes are structured the way they are, anything that the FCC would do in this space would inevitably result in uneven regulation across the Internet ecosystem. Put most bluntly, companies or individuals offering like services would be regulated differently.

The third factor, I think, is the processes of regulation at the FCC. It is anticipatory regulation. It is a process that does not fit well in the Internet space.

The fundamental problem that I see as a result is in making policy this area is that there is a huge disconnect between Congress, the statute that Congress has adopted, and the mission that the FCC is attempting to undertake with its current notice of proposed rulemaking.

I think the FCC has taken on a most difficult assignment, because it doesn't have the statutory authority or structure within which to take on this assignment. Probably what we should be doing as we look at the future of policy for the Internet space, is thinking about doing it right.

And doing it right means that you go to Congress, which is the policy

making body for the nation, and attempt to get Congress to establish the appropriate policy for the Internet ecosystem and not try to shove whatever policy we're making into a statute where it simply doesn't fit.

MR. MAY: Okay, Tom, thank you very much. As always, there's much there to think about.

Now, we're going to move from the industry execs so to speak to the think-tankers and academicians here and we'll start with Rob Atkinson, please.

#### PRESENATION OF ROBERT ATKINSON

MR. ATKINSON: Okay, thanks, Randy.

Pleasure to be here and I guess I want to say I have three issues, too, like Tom, but they're a little different.

A lot of what I want to say, we've already said it three years ago with a paper Phil Weiser and I wrote called, "A Third Way on Net Neutrality," and I haven't changed my views very much since then, which I'm not sure what that says about me.

But I guess the first question is, are there problems and have there been problems? And I would argue, no, there haven't been other than Madison River which we talked about, and that was the right decision.

I would not put the Comcast case in that. I might put the Comcast case in a problem of transparency and how it was done, but not when it was done and certainly,

I don't think there have been problems, at least on the wireline side.

Wireless is a different question about what is a problem and what's not a problem. So the second question is, if there haven't been problems to date, are there going to be problems?

And there's a recent study -- I think it was the NYU study a couple of weeks ago that had a whole very detailed and relatively sophisticated analysis of the economics of this.

And it was all premised on a very interesting and a completely, in my view, erroneous assumption which was what would happen to the entire innovation ecosystem if you allowed companies to mandatorily charge prices on the upside. And they're probably right. If that was the case, that would have bad effects on the ecosystem.

I can't imagine that that's going to happen. I just don't see that in any realm of possibility. Nor do I see it any realm of possibility that we're going to see a blocking right. That just hasn't happened and I don't see it happening.

So I worry that where we are today is essentially that we're moving into kind of a European space of using the precautionary principle to go forward with things where we haven't had problems to date -- and we might say, "Oh, we better do it because we could have problems."

The third point would be, and of all the points made, I think the most legitimate point which is that there may be uncertainty about what can and cannot be

done, and therefore that uncertainty could deter investment.

In other words, an application provider or a content provider may not know why they're going to be blocked, in the future, or may have discrimination against them and it deters them from innovation and investment.

I would argue, though, it cuts both ways -- an application and content provider might be also uncertain whether they're going to be able to provide prioritized service if they're coming out with new product or service that requires some kind of network management.

Well, this debate is pretty uncertain. It could say, quite easily lead to a ban on that either inadvertently or advertently. So there's uncertainty on both sides of that, I would argue.

So I guess my worry is that there's a real risk that if we do -- on the one hand, there's clearly identifiable harms one can envision to the Internet ecosystem -- bad pricing. In other words, forced pricing on the application or content side, blocking for discriminatory reasons, anticompetitive reasons.

Those are all bad things that we at ITIF completely oppose, but at the same time, there's good pricing in our view. Letting somebody buy a prioritized service particularly if it needs some kind of special service, like a latency sensitive application. That's a good thing.

Blocking certain types of sites, we think is a good thing. It's clear that we should be blocking sites, for example, that are malware sites, child pornography sites.

It is clear we should do that.

So my worry is that if we try to deal with the bad, we also get rid of the good. So what do we need to do? I think we need to do what essentially the Canadians have done with the approach of aggressive oversight and watchfulness.

Companies can come to them and talk and work it out and the goal there is for the Canadian regulator to essentially stop or prohibit the kinds of practices that we would consider unfair and anticompetitive, but to let the ones, the practices that are good and pro-competitive and pro-consumer, to go through.

So having said that, let me just close by saying, I would hope that we could -- I mean I'm encouraged by Rick and Kyle's comments, because -- and others here in this debate. I'm encouraged that we should be able to figure out a way that we could all agree on the overall goals.

Now, in reality, there are people in this debate on each side who I don't think could do that, but I'm not sure they need to be given as much voice as they get today. I think the voices that should be heard are the people who are willing to come to the middle and agree on reasonable and practical goals.

I think those goals should be something along the lines of we should all be able to agree that voluntarily two-sided pricing, done in non-anticompetitive way as open to competition, is a good thing. I think we should also be able to agree that mandatory two-sided pricing is not a good thing.

You shouldn't force somebody to get best access. You shouldn't force

somebody to pay extra other than they're already paying through their ISP to get upstream traffic. You shouldn't force an extra price on that. I think we should be able to agree on that. I think we should be able to also agree that blocking bad sites is a legitimate practice.

There are bad sites out there and blocking them is, I think, the legitimate thing to do. And this notion that people equate a malware site with Chinese Internet oppression is similar to saying the Chinese put people in jail for criticizing their administration, and we put people in jail because they've killed someone. Therefore we should abolish our jails. It's sort of an absurd notion.

We're conflating a type of practice with what it's being done for. So I think we should be able to agree that blocking bad sites is useful and that there ought to be a transparent process that's clear, and ideally with a strong level of government oversight, and that blocking legitimate sites or degrading legitimate sites is completely unacceptable.

So I would end by just saying I think we need to move this debate, essentially, away from the cyber-libertarians who have, I think, way too much influence in the debate who grew up using the Well who would argue that there is no way that you can violate my autonomy in any way, shape, or form by blocking any sites or doing anything like that. I have to have total autonomy to do what I do.

That's not the way the real world works. The real world works is we're all part of a society that's governed by a set of norms and practices. And so with that

I'll stop. Thank you.

MR. MAY: Okay, thanks, Rob. When Rob mentioned a couple times that he was worried about these things, I was remembering at last year's conference when I was having that conversation with Blair Levin and he told me I worried too much several times. So I'm in good company. Christopher, go ahead.

## PRESENTATION OF CHRISTOPHER YOO

MR. YOO: Like Kyle, I've done my share of talking on this issue. In fact, I've spoken and this is the third time I've spoken in this room at an event sponsored by the Free State Foundation on this subject. So --

MR. MAY: Well, I'm hoping eventually they'll get it. So, you know, maybe the third time's the charm.

MR. YOO: Yes. Well, I know that there are a number of people who are paid on an hourly basis who are hoping they won't, here in this room. So, you know, but set that aside.

The views I've had about investment and a lot of the different aspects of the economics are all in the book chapter and I'm not getting any royalties. I'm not plugging it for that reason. Although, I'm sure Randy is.

My reaction is, I would commend it to you, and I want to take up a very, very different part of the conversation and to try to really say something very, very

new. Which is what has struck me in the debate, and in the published literature, and even in the academic literature is an almost total absence of an understanding or discussion of the basic engineering principles that operate on the Internet.

And what's really interesting to me is the engineering perspective is not one of absolutes. There is not one architecture or protocol that's good for everything. If you ask them, how do you solve this problem? What should we do? They'd say, "What problem are you trying to solve."

And depending on that, you're going to have something that's dynamic, changing with the situation, depending on the problems and changing across time as the cost and the nature of the problems change.

So I started beginning an extended project digging into this and, you know, everyone's saying that in a sense, the Internet's been a tremendous success.

Let's keep it the way it is. Why kill that?

And I guess my reaction is that we should never forget that the Internet was really designed for a very different purpose. If you actually read -- there's a great piece by David Clark looking at the old DARPA days and he himself says, "Look, it was a military technology. It didn't emphasize things like efficiency. It didn't emphasize total costs, or even how those costs should be shared." And he said, "All those things are important in the commercial Internet."

But what's really interesting is if you actually dig into this literature, they say, "You know what? The Internet doesn't do everything well. And in fact, the kinds

of things that it doesn't do well are precisely the kinds of things that the new technologies and the new applications are demanding of the Internet and it's struggling to fix.

Okay, I'll give you some straight examples: mobility. The Internet was not designed for a mobile environment where your location is changing all the time.

And that in fact it requires you, in the current architecture, to route traffic in a very inefficient way.

And, by the way, most mobile devices don't even have an IP address.

They are going through an Internet gateway and it works on fundamentally different principles that don't even involve Internet routing and congestion management is completely different.

Second, multicasting, it was done from one point to point connection. An e-mail or a file transfer. So if I'm sending to a hundred thousand people the same message, I have to send a hundred thousand duplicate packets to my first hop router.

It's a tremendously inefficient way to use the system. Security. Never designed for that because the military had it buttoned down and ever since we've had an e-commerce world, we've really struggled to deal with that. Interactive media and cloud computing. A very different architecture. We have different players imbedded in the system instead of an edge-based system the way it was originally conceived of.

IP addressing, we talked about people predicting catastrophe. It's interesting. We're talking about IP address exhaustion.

Interestingly, there's a problem involved that the engineers recognize that, even if we shift to IPv6 and get more addresses, won't be solved with just the explosion of the routing tables and if the nature of the solution we use to do that before is inconsistent with the provider independent address system at IPv6.

And then the last thing that I would say is, the Internet's not very good at change. In fact, there are a number of government-sponsored initiatives -- new work by DARPA, GENI, and FINE by the National Science Foundation.

I'm just told that the National Science Foundation is gearing up a new one. The problem with this is that there's a whole bunch of engineering literature that says we're stuck, and the parable is that the layered architecture of the Internet is very good at encouraging innovation within the layers from technologies that can work within that system.

But what about the technologies that require a fundamentally different layered architecture that need to take a flame torch to the entire thing in order to work? Things like mobility in some of the things I'm talking about.

I can cite you twenty articles that say we don't have a transition path to that new Internet. And that's why we have projects like the Clean Slate Project.

And so what we starting to see in the engineering community is a tremendous acknowledgment that, in fact, this is not a platform that does everything well. And if you look at the way that we're moving towards mobility and these highly interactive applications, -- interactive video is another one that the Internet doesn't do

well.

That is really going to be the core of what the Internet future's increasingly looks like. Now, the other thing that's really striking about their engineering literature is we're all fighting about discrimination or prioritization. What they will tell you is that's not a bug. That's a feature.

That, in fact, it was part of the original Internet's design. There was a type of service flag in the original Internet. It's why they divided TCP and created different levels because different applications need different things. And there's been initiative after initiative to try to find new ways to do this. Now, the engineers will give you language and I'm happy to talk about this -- integrated services, IntServ, DisServ, MPLS.

Now, to explicit congestion notification. And now there are two wonderful proposals out. There's one called VECN which is a new system they're proposing, but my favorite one is one called LEDBAT which is not prioritization, it's de-prioritization. It's worse than best efforts routing for stuff that doesn't need it.

Now, why is this important? Prioritization, what we learn from the comments in the NPRM, one of the biggest surprises is the number of minority groups and small businesses who actually oppose regulation. Why? They recognize that prioritization allows you to build smaller pipes, lowers the cost, and allows you to get into more communities.

They recognize that you can don't have to rely on CAPEX solutions. You

can rely on OPEX solutions. And it scales better in a world where CAPEX is increasingly dear. That's a benefit for some of the communities that we were talking about trying to serve in the first panel.

The engineers have always recognized that, and are looking for new ways make it happen and, in fact, what you'll see -- the hardest part to me about looking at the engineering literature, is they're extremely passionate and they're extremely opinionated. Not that that would ever happen where the people in the policy space are lawyers.

But what you'll discover -- I think the fairest thing that you'll see is the ability to say, "Build bigger pipes, you don't need to do any of that." And people will say, "We have to do all that." When I read the textbooks, they say, "This is a debate." And there are people who have a passionate disagreement about that within the engineering community.

From a policymaker's standpoint, it seems that when the technical experts can't agree and are still fighting about what the right solution is, that it is absolutely the wrong time for a policymaker to step in and predetermine one type of solution or the other. Because we haven't finished that debate.

MR. MAY: Christopher, just take about one minute and wrap up if you could.

MR. YOO: My closing thought is this: The one danger that has struck me is that the network neutrality argument has always been inherently a conservative one.

Let's keep the past.

But the problem is the network is changing. There's also a danger in not recognizing the promise of change and being too rigid and sticking with the past.

What all the literature I'm reading now suggests is we actually might be falling in the same trap. -- We're asking the network to do different things. We need new things out of it and the tendency to say we need to keep things that we put in the past, because it's done so many great things without -- yes, and it has -- risks missing the same kind of opportunities that some of the people who advocate network neutrality say we would have missed had we not made the kind of changes we made then.

MR. MAY: Okay, thank you very much, Christopher. I didn't hesitate to break in there because, as Christopher said, this is his third time at an FSF conference and I'm sure there will be another opportunity.

That was terrific. His insights are always good. I'm afraid if you talk too much about that engineering stuff, all of these people that are here -- this tremendous crowd, you know, they may not all absorb it at once. That was very helpful.

Now, as Howard Shelanski knows I've invited him over the years and tried to get him to come to some conferences and he was on the West Coast and it never worked out. So I'm delighted that he's on the East Coast and is able to participate. In order to transition us into the Q&A phase interaction, I'm going to read you just one quote from that 160-page FTC report that I'm sure you've probably memorized. And then maybe in the course of your initial remarks, you can comment on that and it will

help us get a discussion going. This was actually from page 160. And it's only one small part.

The Commission said: "To date, we are unaware of any significant market failure or demonstrated consumer harm from conduct by broadband providers.

Policymakers should be wary of enacting regulations solely to prevent prospective harm to consumer welfare particularly given the indeterminate effects on such welfare of potential conduct by broadband providers and the law enforcement structures that already exist," from the FTC staff report.

So with that, why don't you take your five minutes.

## PRESENTATION OF HOWARD SHELANSKI

MR. SHELANSKI: Well, thank you, Randy.

So I'm from the government, and I'm here to help all these good folks.

I'm obviously speaking in my personal capacity, not for the Commission and I will come back and maybe address that 2007 report very briefly.

Let me just start off by saying that one of the things we've been hearing today, which I think is absolutely right, is the idea of Internet autonomy is ridiculous. The Internet is inherently and by necessity a mediated system. You do not control the content that is sent to you.

If you did, if the Internet worked by your accessing only the content that

you wanted and nothing else could come down the pipe to you, we might be able to talk about autonomy, but that's simply not the case. An enormous amount of stuff is sent to you that you don't want and as I get increasingly addicted to my Roku box, I would hate to have streaming video interrupted for some spam e-mail from Russia. It may be my cousins who are sending that spam e-mail, but I don't want it anyway.

And so once you start to talk about content that you want and content you don't, you're talking about mediation. And once you talk about mediation, you're asking by whom and on what terms. And since we're there, we have some hard questions to ask. And now we're outside this fantasy world of a completely nondiscriminatory, completely unmediated system and I think hard questions arise.

Once you ask who's going to mediate on what terms, I think one can realize fairly quickly that the net neutrality debate as it has proceeded so far, I would say goes too far too and too narrowly, and we might want to proceed more broadly and more modestly. It is not the last-mile networks that are the only mediators out there.

With all apologies to a company that I like and admire very much, if Google can dump Beijing, it can sure as heck dump you as an application or content provider.

The possibility of putting gateways at many different layers in all the application space and the artificial divides that were alleged or talked about between network spaces, last-mile networks, and the applications and content space is artificial indeed.

It is very variegated and layered space when you get up into the applications space and if you do that funky technical analysis that Rick talked about, you begin to discover that there can be tollbooths and bottleneck discrimination at many layers.

Once you recognize that, the idea of open Internet cannot be restricted to the current analysis of the discrimination at the entry to a last-mile network. It's ridiculous and I would submit that if you attack network neutrality solely at that level, you'll be back revisiting these same problems later when the tollbooths arise elsewhere. So we need to think more broadly.

Now, why more modestly? Because it's not clear once you think more broadly that ex ante a priori regulation is the way to go. Nor is it clear that it's as disastrous as my good friends at Comcast and Verizon would say that it would be.

Another feature of this debate is extreme polarization. The sky will fall if we don't ban discrimination. The sky will fall if we do. There are all kinds of unanswered questions on both sides of the debate.

We don't know, for example, whether any innovation in the applications or content layer would, in fact, be deterred by individually negotiated discriminatory agreements. I think there's a lot of truth to the statement that the examples of actual harm are -- I don't know if they're nonexistent, but they're certainly few and far between.

On the other side of it, it's not crystal clear that you ruin the ability to

take advantage of two-sided markets and to more efficiently raise capital to invest in networks if you have some limits on discrimination. This is not a binary choice between banning discrimination and having a complete free market.

There are some kinds of intermediate paths that Rob Atkinson talked about. I've proposed others in an article I've written. I think everybody should step back and be a little more modest about what they know will or won't happen and once we're there, I think that there's some real cause for caution at the FCC.

I applaud the initiative that the Commission's taking. I think you have to be proactive because once the harm is done in a network kind of market like this, it will be enduring, but I think one has to realize that you don't want to go too far.

Banning discrimination is not something that's feasible. You may want to go to a tiered system. You may want to look more carefully at intermediated kinds of things and focus very carefully on the kind of ex-post case by case analysis that Rob Atkinson talked about.

I'll just close with a further note and that this gets to something Tom

Tauke raised. Jurisdiction and institutional setting for regulation in the Internet space
is going to be a very tricky issue. We don't know what's going to happen yet with the
kind of jurisdiction – the ancillary jurisdiction that was exercised in BitTorrent and

Comcast.

But I'd be willing to lay a bet, and I doubt I'd get any takers in this audience for the other side or at least very, very few -- and that argument was presented

by the FCC as well as it could be presented by anybody.

So once you start to see ancillary jurisdiction as being a very ineffective tool under the current state of legislation for the FCC, you have to think hard. Is the right institutional setting to go back to Congress? Do we give jurisdiction to another agency; just say hypothetically, the Federal Trade Commission?

There are a variety of hard questions on both fronts, but this is going to be an issue that is of increasing complexity both because of where we have to look for where the problems will arise and because of the embedded legal barriers that may exist to certain approaches.

So contrary to Chris's hope, we're all going to be here for at least a couple more of Randy's fine conferences. Thank you.

MR. MAY: Well, thanks very much, Howard. I should say when you hear someone like Howard, it makes me appreciate the public service and the dedication of public servants like Howard to come and serve.

And that is true of the people from the FCC that were here earlier and from NTIA as well. Now, with that, I'm going to give Rick Whitt-- I'm going to give you two or three minutes, so be succinct. But you can sharpen the differences now.

After you speak, I'm going to see whether any of the others who want to further sharpen the differences back at you. So go ahead.

MR. WHITT: I do want to say, I spoke on a net neutrality panel a couple months back in France, and I was up against France Telecom, Deutsche Telecom, and a

moderator with a law firm affiliated with one of the incumbents and I said, "Back in the states, that's called a fair fight."

But I won't say that now. So quickly, I think it would be useful to kind of use Tom's three questions. Is there a problem? What's the policy? And how do you achieve it? Is there a problem?

I haven't read the entire set of comments filed yet in the proceeding, but I did come across a really interesting one from Sling Media. Sling has had an ongoing discussion with our friends at AT&T since last May because the Sling Media mobile application has been denied access to the network.

And AT&T's stated reason for that is network management; that it's a congested network and it takes up too much capacity. Well Sling, I think, did a very interesting analysis showing that, in fact, there are other applications AT&T has in the network to do pretty much the same thing, but actually take up a lot more capacity than what Sling does.

Sling's application actually utilizes certain protocols that automatically constrain the amount of capacity being utilized depending on what's going in the network at a particular time. And so it raises the question, is this really reasonable network management because AT&T's network, by some accounts, is not able to handle certain types of traffic or is this an attempt by AT&T to limit the ability of a would-be competitor to provide this service for free over the network?

The problem is we don't know and we don't have anybody out there, as

far as I can tell, who is an actual independent third-party arbiter to figure it out. It would be great if industry could come up with something or if there was another body, like the Federal Trade Commission, perhaps, that could be involved.

The FCC's jurisdiction, that's been mentioned, is at this point not entirely clear. So the point is simply if there's somebody out there who has a problem and they are faced with the unilateral decision by a broadband company which has, of course, the pipe and the ability to foreclose access to the pipe, where does this person go?

So I would submit that's at least one example of something where somebody somewhere should be able to take that on. In terms of the current policy and the notion of jurisdiction, it's sort of ironic. I think AT&T and Verizon and others do a very heroic effort to avoid Title I jurisdiction.

But I think the more they do that, the more likely it is they'll end up under Title II and I'm not sure that that's actually in their best interests and I think our point is simply somebody needs to have jurisdiction over whatever happens over broadband networks.

Broadband networks are too important to our economy, too important to lots of other things happening even outside just basic financial and economic activities. It's social. It's personal. All those things mixed into one. Somebody needs to take on the challenge and the burden of dealing with any situations that arise on those networks.

To Rob's point about the voluntary, the two-sided pricing, we go into this in some detail in our comments and I'll just give you the real quick 30-second summary

why we think that that's actually not a good thing. Or at least in some instances it's not a good thing.

We're not trying to be doctrinaire about it, but we think that over time the tendency to rely on these paid prioritization deals which, by the way, Google would make out fine in that situation because we've got the deep pockets. We could just simply buy out all of those applications and buy out all of the prioritized treatment and we'd come out ahead. But that's not the way we envision the Internet. We'd like to see the vibrancy and richness of the small guys taking on the big guys.

When you had that kind of a system, it raises the barriers to entry. It raises transaction costs.

Can you imagine negotiating with thousands of small carriers all over the country and not even to mention around the world to try to figure out what they're going to charge you for any particular use of application at a particular time?

That creates an arms race that ultimately benefits arms merchants. It's not so clear if everybody's buying into it, you are all sort of raising the bar, but you all end up in the same place relative to each other in terms of what the experience looks like.

In many cases, it could be a zero sum game.

I think if you look at the Amazon comments, it's interesting to note this concept of, if you're not harming somebody else, that's okay. Well, how much of the things that happen at the router level inherently do harm you? If you're putting somebody else's packets in front of somebody else's, is that inherent?

Again, I think these are the kinds of questions that need to be asked and discussed, I think honestly. It fails to reflect all of the Internet spillovers and externalities that happen out on the Internet.

Those kinds of things can never be taken fully into account in pricing these situations. It subverts that transit market, during transiting.

MR. MAY: Rick, go ahead and then --

MR. WHITT: I'm sorry. During transiting, it reduces incentives for investing capacity. If all you're doing is monetizing scarcity, then what you're doing is saying, "We want to put boxes in the network rather than invest in capacity." Is that the right kind of incentive structure we want going forward?

Not to say these things again are inherently bad or evil. It's just to say these are the kinds of questions we need to grapple with before we go down the road of saying that two-sided markets should work in the broadband context.

MR. MAY: Okay, well that put a lot on the table. I just have one quick question. Maybe it's only rhetorical. But when you were talking about the two-sided transactions and your concern about them, I mean am I correct?

I think what I heard you say is you're not concerned because of your size and dominance and the fact that you're the biggest guy on the Internet about how that would affect you, but you're just concerned about the next Google in somebody's garage and making sure that they're protected.

MR. WHITT: Yes, it sounds strange, right? It actually sounds strange,

but we had a conversation in the company.

Many of the conversations around us when net neutrality first got going as to what position the company should take because by some views it's, "Hey, we're the deep pockets. We can afford to pay these guys. We come out ahead. So what's the problem?"

But the overwhelming view is, no, the Internet is different. The Internet is this unique thing.

MR. MAY: Okay.

MR. WHITT: This principle is unique and we want to be able to have that out there as the platform for innovation not just from us but lots of other players.

MR. MAY: Well, that is fully consistent with any company that has as its motto, "Don't be evil." So I'm not shocked in any way. Now, I want to ask Tom or Kyle, first, whether they want to respond to anything that Rick said in terms of his responses. You guys? Kyle?

MR. MCSLARROW: Well, just a couple points and then maybe Tom can jump in.

I would just point out sort of an obvious counter that the impact in terms of the economy and social interaction that he described for broadband network providers as justifying some kind of government role could easily be turned against Google or any other important Internet application provider.

In my mind, the justification for regulating everybody, it seems to me,

goes the other way, which is all of us are important. We're all in the same ecosystem.

I think Howard made a good point.

It's getting harder and harder to just draw bright lines and say, "This group is a last-mile provider or a network provider. This one's on the edge. They are an applications provider." These are all companies with thousands of miles of fiber and software and technology and equipment and they look very similar in some ways if you get into the engineering guts of the operation.

The final point on the jurisdiction. I think there are probably a lot of arguments about Title I and Title II that we're going to have, since we're going to have to wait for a court decision.

But it may well be that the simplest answer is the obvious one, which is when in doubt, that's probably a place for Congress to actually step forward. I think that's why we have them.

MR. MAY: Anyone want to respond now? Tom?

MR. TAUKE: We certainly have spent a lot of time arguing the merits of net neutrality policy. But as we do that, we're always looking at it from the perspective of FCC regulation. I think that it's really important that we step back and look at it from another perspective and some of that has been offered this morning.

I think that I haven't heard anybody in the debate who has said there's no role for government. That there's no role for government oversight over this space.

The question then is, who has the oversight and how is it exercised?

The nature of FCC regulation, there's a lot of controversy about the FCC being the player in large part because it won't look at the whole ecosystem because it doesn't have the capability of doing so. It could be the FTC by the way who has that.

But that's a decision for Congress to make as to what the policy is and who should be implementing the policy. And if you start from that perspective, my guess is there's a lot more agreement than we have when we're starting from the perspective of looking at what kind of FCC regulations should be adopted.

So when we think about trying to reach a logical conclusion for the country, which is having a workable policy for the Internet space, it seems to me that starting with the statute would help a lot and that's what I attempted to suggest in my earlier comments.

MR. MAY: Christopher?

MR. YOO: One comment I would make. The two-sided market argument is actually addressed at some length in the chapter. I'll just put it this way. Rick says it's the deep pockets that will pay. I don't think that's born out.

What's the first -- one of the earliest versions of prioritized service in sort of old world is Express mail and there is a small business that I know of where they were starting -- they were sending brownies overnight and they were very poorly capitalized, but they paid for the service.

It's not who's got the pockets. Who needs the service to make their business model go? Willingness to pay is different, and if you'd have a new innovation

that requires that to make it go, in fact, for you to get funding from a capitalist source, you have to have that and you have to have the ability to get that sort of prioritized service or it won't work.

The second thing I would say is that what's missing from the debate is we are really entering a different phase of bandwidth build-out. The first phase was leveraging legacy networks, primarily coax and twisted pair. And the estimates I saw were something like \$400 to \$800 per subscriber. The world of the next generation of bandwidth increase is going to be more expensive.

FiOS estimates run around \$4,000 to \$8,000 a subscriber. Wireless estimates run somewhat lower, but wireless has its own set of challenges in which prioritization and some form of discrimination is much more likely.

And so in a world -- it's not surprising that if we're going to see -- unless we're going to find a government who's willing to drop about 3 to \$400 billion to build out the 100 megabit Internet, which is what the estimates run, this is going to have to be done by companies who generate revenue to cover those costs.

One last point about discrimination -- when you have a network made up of 30,000 autonomous systems negotiating arms-length -- interconnecting through arms-length transactions -- no two bits are going to pay the same; are going to travel the same.

And what you're going to have -- it's going to be entirely dependent on the relationships they negotiate, which is going to be a reflection of bargaining power,

and that's the commitment we made when we decided to run the Internet on a decentralized basis.

The danger is if we try to make that nondiscriminatory, you're going to have to scrutinize all those relationships and how the traffic moves, and that's just not a tenable situation inconsistent with the system we have.

MR. MAY: Okay, just a minute, and then Howard has -- had his finger up, too. But, you know, Christopher keeps referring to his chapter a lot.

So for those of you that haven't read it and -- for those of you who haven't read this book, when he says this chapter, he's talking about his chapter in this book, "New Directions in Communications Policy." Now, here it's on sale for \$12.

MR. WHITT: Randy, can I just interject. Actually, I have a good deal for people. I have actually some copies of some articles I wrote that are out on the table someplace and they're free. So --

MR. MAY: I'm undercut here again. Well, it like I said earlier. For those that were standing in back, the price of those seats is really no higher than those that are up front.

Now, what I want to do is this. Howard had his hand up and then Rob and then again I'm going to save a little time for questions. So you think of questions. But before I turn to them, because Christopher just mentioned discrimination.

This is something – Howard, you mentioned it when you did your initial remarks. I want to read, because I think this help focuses a key issue -- I mean to me it

seems like the Commission is adding a new rule on nondiscrimination and a lot of the debate in this proceeding, I think, has to do with discrimination and whether it's a good thing to add that and, if so, how it will be enforced and everything.

So to put a point on it, and maybe we can get some responses, here's what the Commission said in its order. This is a quote: "The ability of network operators to discriminate in price or service quality among different types of traffic or different providers or users may impose significant social costs particularly if the discrimination is motivated by anticompetitive purposes.

"At the same time, we recognize that traffic on the Internet is increasing rapidly and that broadband Internet access service providers must be able to manage their networks and experiment with new technologies and business models in ways that benefit consumers.

"The key issue we face is distinguishing socially beneficial discrimination from socially harmful discrimination in a workable manner." Now, of course we've all sort of touched on that a little bit, but that does seem to be a key issue.

So anything anyone has to say about whether it's practical to do that; the cost and benefits of doing it or whatever, and I think you alluded to that, Howard. So you may or may not pick up on it.

MR. SHELANSKI: I'll take a quick crack at that. Then I'll very quickly answer the question you asked me earlier. So just very quickly. No, discrimination's an enormously difficult problem.

You will hear from network owners that because applications and content are complements to the service that they provide that they have absolutely no incentive to discriminate against any piece of content or application.

That builds on what has been popularized as a certain economic theorem that turns out to have so many holes that it's not much of a theorem.

There are lots of examples and I won't bore you now for where a firm has incentives to vertically discriminate in an anticompetitive way and there are conditions under which it can happen and they're not particularly heroic economic conditions.

So there is such a thing as bad discrimination which means that the FCC is exactly right to be asking the question it's asking, and to point to issues on both sides.

But I think it needs to expand the question a little bit and not just say, "Can we discriminate between them?"

But the question is, is it possible to write a rule that won't make the wrong kind of error in too many cases. And if you can't write that rule, is it better to use the Atkinson-Weiser kind of ex post approach which might let a few bad things happen, but make fewer over enforcement errors. It's a judgment call.

Very quickly, the FCC opted to make the judgment call against regulation in 2007 and that FTC staff report with the conclusion you recorded on page 160 was premised on waiting and seeing how competition developed in the broadband market.

I think we're a few years down the road and certain of the technologies that the FTC staff was relying on in 2007 to wait and see just has not materialized.

Broadband over power lines? Okay. Stop laughing and so I think it's a serious change of circumstance. I would just suggest that you look at Chairman John Lebowitz's speech at the FCC last week where he suggested that rethinking some aspects of the 2007 staff report might not be unreasonable and endorse the FCC's going forward with its rulemaking whereas the 2007 report did not.

MR. MAY: You must have been the Atkinson that he just referred to I think.

MR. SHELANSKI: That would be the one.

MR. ATKINSON: I would want to respond I think a little bit to what Rick said and Rick brought up the case of Sling which I have to say I'm not familiar with the details of that. But in bringing that up, he alluded to the fact that there could be applications that basically mess up a wireless provider's network.

So the question here is this one of those or is it something else? But to pass a rule which would simply say, "We're not going to do it. We're not going to allow anything," which, in other words, no management, no blocking, would essentially be saying, "We're going to allow applications on wireless networks that mess up the network for everybody."

And in a lot of ways, I think what we're in is a debate where the policy goal of the debate is essentially to have an intellectually lazy solution which is we either ban everything and then we don't have to deal with these unbelievably difficult questions. What is going on with this particular case?

Or we just say we're not going to do anything and providers can do whatever the heck they want. Those are intellectually lazy solutions. And, I think, the more legitimate solution is to say, "Wait a minute. What's actually going on in this particular case?" Is it about managing the network? Is it about something else?

And, Rick, to your point about bit prioritization and all, those are really good questions. Absolutely. Those are the kinds of questions we need to be asking and I guess what I find disturbing about the debate is if you add up all of the hours and mega-hours and giga-hours that we have had on panels and writings and all of this that's focused on these broad questions. Is it bad? Is it good?

If we'd spent a tenth of the time on these much more specific questions about how do we identify problems and equally importantly, what is the exact right way to deal with them and put all of our collective brainpower onto that question, I think we'd be a lot farther along than where we are today.

MR. MAY: Okay, I want to ask anyone that might have a question to proceed to the microphone and we'll get ready to take your questions if you have any.

While you're doing that, I see Ms. Kang there. And it's great to have you here.

Before we turn to that question, one thing that just struck me in listening to this and we'll just keep it in mind and not have them answer it now, but one of the proposed rules, of course, has to do with transparency and requiring transparency and consumer disclosure.

And it does strike me, and when I filed comments, I said I thought that

was a good thing if properly drawn, an important rule. That rule in and of itself might go a long way, or some ways, towards resolving some of these issues, the transparency rule. Okay, yes.

Now, just for the record, we're transcribing. If you'd just identify yourself for the record.

QUESTION: My name is Cecilia Kang. I'm with the Washington Post. I know that this panel is about net neutrality, but it strikes me that when you talk about jurisdiction and we bring that up, that that could bleed into so many other categories in the broadband plan that's currently being crafted at the FCC.

So can you talk a little bit about, though this is about net neutrality, Mr. Tauke, when you talk about Congress -- this being something for Congress to take up, what does this do about some of the other issue that are taking place in the FCC that relate to broadband?

MR. TAUKE: There are a number of agencies of the federal government that are already working on things that would be part of the National Broadband Plan.

The Congress directed the FCC to develop the plan, but they will be working, as we heard in the earlier discussions, with the Department of Energy on smart grids, with the Department of Education on education initiatives, with Health and Human Services on healthcare over the Internet, with a variety of agencies and departments of government looking at how you implement a national broadband plan. I think the issue is a little bit more narrowly defined and that is: How do you have a

policy that governs the Internet? And I think, as I alluded to in my remarks, that there are some fairly clear things that we can agree upon which establish a framework for that policy, but a big part of this is who has jurisdiction and that is what is becoming the most difficult aspect of the policy.

Because you can't achieve the policy framework that you want if you're giving to the FCC without additional authority being granted by Congress and that's the core problem I think that we face.

MR. MAY: Christopher, pretty quickly.

MR. YOO: We've lived through this before. Cable came in 1950 without a clear jurisdictional mandate. We had a Supreme Court decision in '68 called *Southwestern Cable* that said it was within the FCC's ancillary jurisdiction. Then we got a series of decisions and this was *Midwest Video* I and II, they said, "Well, yes, but it's not blanket."

So they started doing nip and tuck and on terms of what was permissible, and then in 1984 we get the Cable Communications Policy Act. So what is this?

A new technology didn't fit the old '34 Act scheme and we have a choice. We can do it the way we did it before; little bits here and getting clipped with the courts and maybe that's the way forward or maybe eventually we get a clear statutory basis which isn't jurisdictional.

MR. TAUKE: And just to add on, I think the right policy is formulating it by looking at the whole. Not looking at it from what do I have jurisdiction over and

what do I do in my little piece. And that's the fundamental challenge with the current approach.

MR. MAY: And Kyle has a comment.

here.

MR. MCSLARROW: Well, actually I was just whispering to you, but --

MR. MAY: Well, tell everyone. Transparency, Kyle. We have no secrets

MR. MCSLARROW: Yes, fact-based, data-driven transparency. So I'm not sure if Cecilia was actually asking, within that question, a question about USF.

Because I do think there's a classification issue that has been raised in that context.

And the only thing I would say, I said earlier.

I do think it raises the question of whether or not Congress just needs to resolve classification of jurisdictional issues. But I do think if you look within the guts of the Universal Service Fund statutory provisions, I just note that 254-B 2 and 3 talk about access to advanced telecommunications and information services.

254-C talks about telecommunication service. That's sort of the hang-up of whether or not you can disperse funds to broadband carriers, but even that says, "evolving" telecommunication services. And finally, it shouldn't be lost of all of us, you have an E-rate program, 254-H, that expressly, and today does, disperse funds for the purposes of Internet access services.

So on the one hand Congress is the right answer. On the second hand, I would dispute the predicate, which is I don't think it's necessary for the FCC to go

down the road and think about broadband deployment. That's already happening.

Broadband adoption I think is another matter. And it may well be that through the E-rate program, they can do something there without going through all the rigmarole that we'd end up going through in terms of a Title II reclassification process.

MR. MAY: Thanks for that. That was a good question that tied together both of these panels. So I appreciate that. Yes.

QUESTION: Howard Buskirk, Comm Daily. Title II seems like it's kind of one of the big -- whether to reclassify broadband under Title II seems like it's one of the big issues. With McDowell, today, I think we've had three of the five Commissioners sort of weigh in.

I think the Chairman's keeping his powder dry on that one for now. But I'm just wondering, are there concerns among other panelists or thoughts that maybe this issue could potentially break down like some of the net neutrality issues have broken down with the Democrats.

You know, the majority voting in favor of reclassification, when it seems just like on some of these debates, we do have some pretty strong fault lines in the Commission. And with this one potentially it seems like you could see the same lines. I'm just wondering what your thoughts were on that.

MR. MAY: Anyone have any thoughts. And I'm going to say while you're thinking of any thoughts that if Joe has a question that's going to be the last one.

MR. YOO: I have one thought to dispute the flip side, which is, could it

be partisan? It could. I hope not.

I mean because it's pretty clear that the President's committed to doing something and they need a jurisdictional hook and so to that extent -- I think that you may see some resistance on that.

Interestingly, you said, "Will this become partisan like network neutrality has?" And I think that there was an area where we were teetering on that. If you look at the record, for example, 24 state reps have filed in the network neutrality proceeding, all opposing network neutrality, all Democrats. Six mayors filed, all opposing, all Democrats.

So I think that it's going to go beyond pure partisanship. Now, they have particular interests often from rural states and they're concerned about the build-out issues. But hopefully, what we're going to see is the flip-side. That network neutrality becomes less partisan.

And if that's the case it may give us some hope that the jurisdictional one may become less as well. Because actually both sides have some incentive to have jurisdiction over the Internet even if they don't want full Title II regulation.

MR. MAY: Tom.

MR. TAUKE: Let me just offer this observation. I think that Title II jurisdiction is, from a policy perspective, a very bad idea. It simply would put the broadband policy in a framework where it doesn't fit and it would, I think, result in bad policy.

But in addition, it is bad politics because instead of moving us in a direction where we would be moving toward consensus, I think instead it would exacerbate the differences among the players. And that again goes back to the nature of regulation, particularly Title II regulation.

It can cover the whole ecosystem. It is backward looking. It attempts to anticipate what's coming, rather than looking at facts that have occurred in the space. So it's just really ill-suited for the space and so, therefore, it would really exacerbate, I think, all of the debates.

MR. MAY: Joe, you're almost going to have ask a yes or no question.

We've got Eddie Lazarus is here and we're going to ask him some of those questions.

He'll be able to answer some of these things in the lunch session for us, I'm sure. So why don't you do a quick one and then we're going to adjourn for lunch.

QUESTION: Okay, let me ask about something that does work in this space and this conversation. I appreciate Rick's comment earlier that when we had the conversation back in '07, you all reached the conclusion that it was, as you said, inelegant network management on our part, not something nefarious.

And we worked well with you, with the IETF, with others to come up with the fair share system that passed muster and IETF has been very happy with it. We continue to use that mechanism as we've done domain redirect, the DNS helper thing. We brought it to the IETF.

The Botnet thing we're doing now -- we brought it to the IETF. It's a

great place to get people like us away from the table, let the engineers talk at the table and work things out. How can we capture what works about this in addressing these issues more effectively?

MR. MAY: Well, you can see that that was a terrific yes or no question! Here's what we're going to do just because we've got lunch and we're going to have a great session in there as well. So anyone that wants to can take, really, 30 seconds or a minute and make a closing statement and then we're going to have to move next door.

MR. WHITT: I'll take 20 seconds. I mean Verizon and Google, in our joint filing, we talked about something called a technical advisory group which could take on a variety of functions not meant to substitute for a regulatory body, but rather hopefully to offload some of the more detailed technical issues, maybe even offer a place for some of the disputes to be resolved.

So, again, I think it behooves the industry and industry stakeholders generally, not just the industry, but others, to be part of that kind of a function.

MR. MAY: Anyone else want to say something closing?

MR. TAUKE: Yes, industry self-government should be done whether or not there's a proceeding at the FCC or any other agency. We need stronger industry self-governance. All of us should be engaging in that process to make it work better.

MR. YOO: Howard said that things didn't work out the way we thought.

And broadband over power lines has been a disappointment.

I will say other parts of it have been much more competitive and worked

out better than we thought. Wireless broadband has been adopted. It is much more successful than I think anyone dreamed it would be in 2007.

And then we're starting to see innovations. There's a small ISP called Plus Net in Britain that prioritizes into eight classes, sets -- it's the highest ranked customer satisfaction, cheap, high-value customer service operation and what we start to see is a lot of interesting creativity.

MR. MAY: Okay, with that, we're going to move next door.