BROADBAND POLICY:
ONE YEAR AFTER THE NATIONAL BROADBAND PLAN

PANEL II

Broadband Policy:
Broadband Policy: What's Next for Spectrum Reform?

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* 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.

MS. SCHATZ: Okay, we're going to get started. Thank you for coming today. We are going to be talking about spectrum reform on this panel, which, if you listen to the FCC and you listen to Congress, is really one of the top issues that they're going to be focusing on this year. We have a great panel today that will focus on some of the new things that are going to be happening, both at the FCC and in Congress, and what policies the U.S. should adopt, as we're looking at this very valuable, yet somewhat scarce resource.

I am going to introduce the panel. In alphabetical order, although not in the order in which they are seated, we have Larry Atlas, who is the senior advisor for the National Telecommunications and Information Administration. We have Kathy Brown, who is the senior vice president of public policy development and corporate responsibility at Verizon. We have David Honig, who is the president and executive director of the Minority Media and Telecommunications Council. We have Blair Levin, who needs no introduction as he participated in our first panel. He is a communications and society fellow at the Aspen Institute. We have Paul de Sa, who is the chief of the office of strategic planning and policy analysis for the FCC. And we have Thomas Sugrue, who is the vice president of government affairs at T-Mobile.

Now, all of the members are going to be giving a short presentation, and then we are going to open this up for questions from the audience very quickly. So, let's start with Mr. Atlas.

MR. ATLAS: Here we go. I want to just bring you up to date on

what the Administration is doing on the spectrum front. There has been a lot of activity over the last six months. Demand for America's spectrum resources is increasing at rapid rates, and the amount of information flowing over some wireless networks is growing at over 250 percent a year. And there has not been a corresponding increase in supply.

To expand America's available spectrum resources, the Administration has to use existing spectrum more efficiently. We need to free up more spectrum for new uses, and thus provide the private sector with incentives to transfer spectrum from current uses to higher-valued ones.

In June, President Obama committed to make available 500 megahertz of federal and non-federal spectrum over the next 10 years for wireless broadband. The initiative, which would nearly double the amount of commercial spectrum available over the next decade, will spur investment, economic growth, and job creation, while supporting the growing demand, both by consumers and businesses, for wireless broadband services.

To make this happen, the President directed the Secretary of Commerce, working through NTIA, to produce a 10-year plan and timetable for making the 500 megahertz of spectrum available and, at the same time, protecting vital government missions that rely on spectrum use.

Three months after the President's order, we at NTIA issued a 10-year plan and timetable. That report, developed with input from other federal agencies and the FCC, identified over 2,200 megahertz of spectrum for evaluation, set out a process for evaluating the candidate bands, and the steps necessary to

make the selected spectrum available for broadband use.

At the same time, we issued a second report, which was a fast-track review that we undertook to identify some spectrum reallocation opportunities that could be done much sooner. In that report we identified 115 megahertz of spectrum that we recommended to the FCC be made available for wireless broadband use now. This was a substantial and immediate down-payment on the President's 10-year goal.

We are currently working with other federal agencies to prioritize candidates' spectrum bands for a more detailed review on a rolling basis. This week we identified another 95 megahertz of spectrum, from 1755 to 1850 megahertz, to be analyzed to determine if the band can be repurposed and made available for broadband use. We intend to complete the review of that band on the timetable called out in the plan, which is by September.

Together with the 115 megahertz of fast-track bands that we previously identified, and another 40 megahertz that was identified in the fast-track report, we have now put about 250 megahertz of spectrum in the pipeline since the President announced the 500 megahertz goal.

Spectrum is a vital ingredient for innovation and growth in the communications sector and the economic vitality of the country, as a whole. The work we are doing to identify additional spectrum is part of building the foundation for continued economic growth, and we look forward to working with the private sector and the FCC to put more spectrum out there for commercial use.

MS. SCHATZ: Great. Kathy?

MS. BROWN: Thanks, Amy. Good morning, everyone. I was re-reading The Long Now -- remember that book -- and also Neustadt's book, Thinking in Time, for another purpose. But as I was thinking about the spectrum issue this morning, I was thinking how much we have to really think in the long term.

Telecom 2000 was the plan that Obichowski and Tom Sugrue put together way back in the first Bush Administration, which set a framework for where we had to go for spectrum planning and for the kind of future that was foreseen then.

Think about it. We actually do have HDTV. Now, it was a tough road. We actually did get the 700 megahertz. Right now we're actually rolling out LTE on that spectrum. And others of my colleagues here in the room have been able to get spectrum and put it to entirely new uses.

In the last two years, in my view, the Obama Administration has, in fact, laid out the framework. Thank you, Blair, for the work that was done in the National Broadband Plan. And thank you, Larry, for what NTIA is doing. We now have a notion of what we need to do for the future.

It's probably a good time to stop and think about the Long Now, and thinking about this future, just as I think back to whatever year that was that Tom wrote that report. I absolutely don't think, as smart as he is, that he actually thought about that iPhone in 1980-whatever. I actually don't think he did. I don't know that we had invented those things at the time.

And I don't know that we actually understood what 3-D television

would look like at the time. Maybe we did in science fiction. But we had to have set government policy in order to anticipate things that we actually didn't know were going to happen. We just knew that if we had the right resources and the right input out there in the marketplace, that in this American economy, with the free enterprise system that we have, that this was going to happen.

So, where are we now? It seems to me we're at the beginning of the next beginning, and that it's enormously important that we get it right here. I think that the Administration has wisely thought about creating market mechanisms for the going-forward plan, and that we really need to think about this so when the demand happens the supply becomes available.

I think and hope we are moving away from this notion that spectrum is this rare thing that, once you get it you keep it, and it never, ever has another use. It turns out that's not true.

The challenge at this point is to come up with mechanisms that allow this dynamic change in the marketplace to happen under economic principles that make sense, and that allow for the invention of the future, even in the present. Now, that's tough business. That is hard.

So now we are trying to figure out what these incentive auctions ought to look like. I think this is hard work. And I personally don't think we're there yet. There are lots of pieces of this that have to work properly in order for these auctions to achieve the purpose for which the idea was invented. And that is that there are willing sellers and willing buyers, and there is some sort of clearing way in order to get this spectrum back into the market. We have a lot of work to

do.

I have been interested for a long time in secondary markets. For the long term, we really do need to think more deeply about them. Bill Kennard was the first Chairman -- I think I'm right on this, Blair -- who really said we could do secondary markets and we could have a change of ownership, leasing rights, whatever the heck it was.

MR. LEVIN: I'm sure Reed Hundt would disagree.

MS. BROWN: Yes, Reed would probably disagree. They worked together and they both got it out there. And we know John Mayo at Georgetown did a good report on what happened over these last years. In fact, there is a market for this stuff.

What we have to figure out is how you can aggregate enough spectrum so that players in the market can get nationwide swaths in numerous transactions, or maybe all at once in some sort of active marketplace so that this can happen.

Finally, to my friend David. Whenever I go on like this, he says, "What about the little guys?" And he's right. There is a lot of room in this market for new entrepreneurs, for big companies like my own, and for companies that have not yet been born. But we have to figure out the way that it happens in a marketplace, so that we don't end up for years and years and years in litigation over things that don't work, thereby holding up that spectrum for good use over time.

I think we have a big job ahead of us, but I think we're well on our way.

MS. SCHATZ: David?

MR. HONIG: Thank you. I would like to talk about the impact of spectrum policy on minority wireless consumers and entrepreneurs. Wireless broadband has a unique ability to provide a bridge across the well-known digital divide, as shown by the wireless adoption rates of minority consumers.

NTIA has reported that, in 2010, African-Americans and Hispanics trailed 20 percent points behind whites in broadband adoption at home. However, the rates of mobile adoption were 7 percent points above whites, 87 percent to 80 percent.

Minorities over-index even more in smart phone penetration. Nielsen just reported that as of December 2010, 31 percent of all mobile consumers in the United States own smart phones. But smart phone penetration was even higher among minority groups: Asian-Pacific Islanders at 45 percent; Hispanics at 45 percent; African-Americans at 33 percent. Only 27 percent of white mobile users reported owning a smart phone.

Minority wireless consumers are a huge and very fast-growing economic market. According to the target market news report, the buying profile -- "The Buying Power of Black America" released two weeks ago, African-Americans spent 9.4 billion on cellular phones and service in 2009, which was an increase of 30 percent from 2008.

With respect to current spectrum policy, MMTC has three specific recommendations that will help close the digital divide facing minorities as producers, and as consumers.

First, we would like low-power television stations to be allowed to participate in DTV incentive auctions. The bills floating around Congress are ambiguous on whether they would be. While only a handful of full-power television stations are minority-owned any more, about 15 percent of low-powers are minority-owned. These are experienced entrepreneurs who produce compelling content that is going to be very useful in driving minority broadband adoption.

Second, we have asked the Commission to authorize AM radio stations to migrate to analog television channels five and six, and thereby be transformed into FM stations -- that's FM sound that you hear, if you tune that way. Two-thirds of minority-owned radio stations are AMs, and most minority-owned AM stations are burdened with inferior technical facilities. That's their historic legacy. An exodus of AM to channels five and six would at least triple AM stations' value.

Third, the Commission should encourage consumers to conserve spectrum, just like they conserve any other finite resource. Conservation especially impacts low-income users, who are likely to prefer a broadband service that may not have every bell and whistle, but it's affordable.

That's why the MetroPCS net neutrality dispute disturbs me. I have to tell you, I've never met anyone who works for MetroPCS. I don't know much about the company, but I've read a lot. And I'm pretty disturbed by what's happening to them. They are very small, compared to AT&T and Verizon.

They have offered discount pricing plans to attract those who want cellular service but don't want spectrum-intense applications, such as those offered

by Skype or Netflix. They have also offered higher-priced data plans to those who wish to have those services, the same way as car dealers offer to sell SUVs as well as compacts. They're not blocking service. Instead, this is just engaging in classic price differentiation, aimed at connecting the underserved, and especially low-income consumers, which they seem to be doing in a pretty dignified way.

Unfortunately, the company has been accused of violating the net neutrality principle relating to network management. This is just a textbook example of why, from a civil rights standpoint, not everything that you call net neutrality leads to network equality for minorities and the poor.

And yesterday Verizon announced a commendable network management approach -- Kathy does not know that I'm going to say this -- under which it will conserve spectrum by reducing through-put speed for the heaviest data users, thereby preserving reliable and inexpensive service for the other 95 percent of us. Congratulations.

These examples underscore why transparency, well-informed consumers, and the shaming culture of the Internet -- those factors combined – fortunately render most Internet regulation unnecessary or superfluous. By avoiding regulatory overreach, we have concluded that the Commission could help free up the investment capital that would be necessary to deploy the wireless spectrum needed so urgently by all consumers, and especially minority consumers.

MS. SCHATZ: Okay. Blair?

MR. LEVIN: For those of you who heard Commissioner Baker, I pretty much agree with everything she said. So I am just going to be very, very

brief.

I want to publicly thank her and Charles, and her staff. It shouldn't surprise you that I agree with her, since she and her staff really helped us write the chapter on spectrum in the National Broadband Plan. A lot of it reflects their thinking and their really great input. They don't necessarily have to say they agree with everything in that, but they had a tremendous influence on it, and made it a lot smarter piece. So I'm very grateful for that.

Let me just add one other thing that I think is relevant to the moment. There will be a big debate in Congress about how to allocate the D-block. That's a really good debate. I hope they have it. We had it internally. We came out in one place, the White House, and certain Members of Congress have come out in a different place. That's perfectly fine.

Here is what should not be debatable. The worst use of spectrum is no use. It is a drag on the national economy that the D-block has been sitting there, unused. No one is investing in it. No one is building jobs on it. No one is creating service on it. That is a drag on the national economy.

Kathy and I may be among the few Chiefs of Staff who have labored under a congressional deadline. I actually did it twice, in the 1996 Telecommunications Act and the National Broadband Plan. I don't speak for her in this regard, but I will simply say that, number one, I did not like doing it; and number two, it was the best thing Congress did. If we did not have a deadline for the Broadband Plan, I would still be there, and it would be really bad.

(Laughter.)

MR. LEVIN: Believe me, in dealing with the Commissioners, a deadline is best thing I could possibly have.

It's now time for the FCC to give Congress a deadline. On Monday, the FCC might as well just say, "We are going to start planning for a commercial auction," because that's the current law. If Congress wishes to reallocate it differently, that's fine. But let's not get to a point where, a year from now, Congress decides not to do it, and then we have to wait another year-and-a-half before an auction can be held.

It's a hard decision on some level, but it's also a very simple decision. You allocate it to commercial, or you allocate it to public safety. It should not take more than a year or 18 months. That's how long it takes to actually do an auction.

By the way, if you are in support of public safety, it's in your interest that an FCC deadline happens, because that's the only way to get to that kind of state of urgency which would cause Congress to actually act.

MR. DE SA: It's always hard to follow Blair. So, first, let me start by thanking Amy and the Free State Foundation for the invitation to be here, and you all, for coming.

I just want to make three very quick points. The first is, before getting into the details of the policy, it's worth reflecting that one of the great achievements of the National Broadband Plan is that we're having this discussion, that we're talking about spectrum. Spectrum has been introduced in a major way into the national discourse.

As Larry mentioned, there is a presidential memo, and in the State of the Union, wireless was mentioned. People are also debating incentive auctions. Whether we agree or disagree on specific policies, the fact that we're having this debate, this discourse, is good for the country, if you believe, as I think everyone on this panel does -- and, hopefully, most of you do -- that spectrum is a critical part of national competitiveness. Going forward, it's very important for the country that we get this right.

Second, I just observed that a lot of the attention last year -- obviously at the FCC -- was on the Open Internet proceeding and on the Comcast-NBCU transaction. But essentially, an enormous amount of things have been going on at the Commission over the last year, with respect to spectrum. Many of them are a result of the Broadband Plan, and largely thanks to Ruth Milkman and Julie Knapp, who, many of you know, have been working away hard to just get things done and get things moving.

So, I won't talk about any of these in detail, although we can in questions. But these are things like the spectrum dashboard, secondary markets, WCS, MSS, white spaces, wireless backhaul, the competition report -- I could go on -- and many other things. Some of them have been through order and some of them are on their way there. But there are many, many things at the Commission that have been moving over the last year on this front.

The last point I will make is, going forward, we would like to spend the next year taking many of these things to order and getting them done. We have three themes for 2011. Spectrum is, as the Chairman has said many times, a key

agenda item in 2011 for us. Universal service, spectrum, and rights of way are the three top priorities for the Commission this year.

The themes for us going forward with respect to spectrum are, first, repurposing, incentive auctions or whatever means it takes to get spectrum to its best possible use.

The second is extension of mobile broadband, particularly to rural areas, tribal areas, areas that are underserved. Regarding the discussion this morning about universal service, it means making sure that this key tool is as universally available as possible throughout the country.

And then, finally, the third theme is trying to examine how the FCC can respond to, as Kathy said, what is potentially a paradigm shift in how spectrum is managed with respect to the secondary markets. And with respect to interference policies, it means trying to see how we can change our rules or change our practices to make sure that, if there is a paradigm shift in terms of the business side, in terms of the technological capabilities for spectrum management, that we're making sure our rules track that and exploit that opportunity.

MS. SCHATZ: Great. Tom?

MR. SUGRUE: A couple things. I agree with Paul, that it's great we're having this debate. But we do need to get moving. As Kathy pointed out, some of us have been having this debate for 20 years.

I think this is going to be a good year for spectrum. As foreshadowed in the State of the Union, in the President's budget, we will hopefully see a comprehensive approach to spectrum reform that will address not only the

D-block, but also incentive auctions and reallocation, perhaps including some specific bands. The 1755-plus band is one that we're really interested in. NTIA has just announced they made a priority to examine that band.

Regarding relocation improvement, there are certain things that can be done to improve the Act from 2004, as to how that process would work. We worked very extensively with the federal agencies to do that, and we have some ideas on that. There was a bill that was moving a bit, got some traction last Congress, and hopefully that will be in there, as well.

MSS spectrum I was going to mention, too. It's another band of spectrum hanging out there, possibly the first application of incentive auctions. If Charlie Ergen owns all of it at two gigahertz, maybe it would even be easier just to get it auctioned and reallocated than the broadcast band. So there are some things we can do.

A lot of people wring their hands about spectrum policy being made for budget reasons. My view of the history of spectrum reform is there are more good decisions made on spectrum policy grounds in the budget process than, frankly, in the spectrum policy process.

(Laughter.)

MR. SUGRUE: They make market-based decisions. The government starts asking: "How can we maximize the value to the country of this resource?" If you believe in market economies, this also maximizes the income to the government.

T-Mobile has been very active in trying to preserve the D-block as a

commercial allocation. Of course we were disappointed in the Administration's announcement. But as Blair said, that's fair game. We do feel very strongly that the worst possible situation is we come back here a year from now and we say, "I guess we will have to argue about that D-block for another year."

By the way, there are some real issues to be addressed by the FCC before that auction. You couldn't just auction it off right now. There are concepts and ideas on how this will work, how that will work, and how it will affect valuations and that will affect the parties who are interested.

We need to get on with that work. Those notices to initiate that proceeding, as I understand it, were written and ready to go early last summer, in the May/June time frame. And they were essentially put on the shelf. I think in pretty short order they could be updated.

It's not an attempt to preempt the Administration or preempt the Congress. Indeed, I would call on the Administration to support the FCC on this. Congress would have a full year, or maybe into next year. It's a reasonable amount of time for Congress to act. If it doesn't, then at least the FCC is in a position to adopt some rules. The FCC would still be six months or more from the actual conduct of an auction.

Congress required the FCC to auction the D-block in January of 2008. Three years passed. You talk about congressional deadlines. Now, they might say, "Well, we tried to auction it, and no one wanted to buy it under the rules at the time," and that was true. But I don't think the FCC gets an indefinite pass. I don't think it can just sit on it forever. There is an implied obligation, when

Congress says, "do this by this date," that three years later the FCC should at least start the process, and get it underway.

If Congress reallocates it, that's fine. We move on to other things. And there are some things in the reallocation bills we're interested in. So we will try to make lemonade out of those lemons. But we need to get the thing on. Frankly, from just a policy point of view, as well as from a company point of view, it's just frustrating to see it hanging out there, and we're not sure anything is going to happen with it.

MS. SCHATZ: Great. Why don't we start with the D-block, since we're talking about that? Obviously, Blair, you didn't agree that it should be given away. But is Blair right? Should the FCC just say, "Look, we're going to auction this off, if nothing more than to just provoke Congress to actually do something"?

MR. SUGRUE: What I have proposed to the FCC is they could do an auction that has two scenarios, because they have to write rules, even if it is reallocated to public safety.

What are the relationships between the public safety licensees and the other 700 commercial licensees? The FCC's National Broadband Plan had some ideas on that regard. The other commercial licensees in the band didn't think much of those ideas, so there will be controversy there.

There will be rules that will have to apply as to how to use the D-block. There has been talk about some sort of joint arrangements with commercial providers that are sort of described in very vague terms.

So, you have one path that says, if it's not reallocated, we have to

enact these sorts of rules, and what should they be. And if it is reallocated, what should it be? And will that be a little extra work, because one of those paths isn't going to come true? Yes, it will be a little extra work. But it's well worth the investment, certainly, to get it underway.

MS. BROWN: I will make the case for the urgency for this public safety network to actually happen.

There is an urgency in putting the spectrum to use. The Administration and much of the Congress thinks that we have got to make sure that public safety has what they need. So let's remember what this is about.

10 years after 9/11, we still don't have an interoperable network. As much as I love my local police, it's not just about the local police talking to the local firemen. It's about local state and federal officials being able to communicate with each other, in the event of an attack.

We seem to remember so quickly that we were attacked in three places in 9/11. And the ability to speak across jurisdictions was greatly hampered. This is a personal thing with me that we're still here and we still don't have this done. The Congress ought to get this done. It needs to. If it's going to reallocate it, let's get it reallocated.

By the way, I don't doubt that there is work to do, even in a reallocation. In fact, the FCC's plan around how to then use this spectrum to make sure these networks get built -- I assume it will be a network of networks that is interoperable -- is a very good plan. We need to move forward on that very quickly.

So, I would like to see some urgency behind getting a public safety network done.

MS. SCHATZ: So, if anybody is going to do that work, Paul, you're the guy, right?

(Laughter.)

MS. SCHATZ: So what do you think?

MR. DE SA: It would be a mistake to assume that because we're not saying it publicly that no work is going on inside the building. Both during the plan and subsequently, obviously, people are working and thinking about different alternatives, and what our responsibility would be under those.

There clearly is momentum with the Administration stepping in on one side of the debate. We're supporting a way to see how that plays out.

MS. SCHATZ: Okay. The next thing I would like to turn to is an issue that was highlighted again this week when the broadcasters put out a statement accusing Time Warner and some other spectrum holders of basically squatting on spectrum, and not actually using it.

There is at least some debate out there about whether there is a spectrum shortage. How do you know if there is a spectrum shortage? You're not sure who is using your spectrum right now. How do we know there is a spectrum shortage if we're not still sure who is using their spectrum?

MR. DE SA: I think it's the wrong question. It's inevitable that there will be a spectrum shortage at some point, if more spectrum isn't brought on the supply side. So whether that's in six months or three years or five years or

seven years doesn't really matter. It means that it's a no-regret sensible move to start trying to put more spectrum into its best possible use, particularly given that most of the areas where there is material spectrum, the lead time is several years to get it done. So, I don't really think it matters at all.

MS. SCHATZ: So is the FCC still working on a spectrum inventory? NTIA, you were talking about doing that, too, right?

MR. ATLAS: That's right. We are working on a spectrum inventory. It's somewhat of a misnomer because we and the FCC all know what spectrum is and what it's used for. Spectrum inventory in the bills in Congress really go to how much that is going to be transparent and readily available for the public to see.

Both the 500 megahertz effort and the broader effort at the FCC are very much engaged in utilizing the spectrum in the most efficient way. In order to do that you obviously have to know what the current uses are.

We don't think that there is any question that there is a need to make more spectrum available for commercial use. We are dealing in an environment which we're not going to change very much. From a regulatory standpoint, in this world five years is fast for getting spectrum reallocated, getting spectrum repurposed, moving existing uses out and bringing new uses in. We don't think there is any question, but that we have to be engaged now, both NTIA and the FCC, to make more spectrum available.

MS. BROWN: Could I talk about secondary markets? We were much in favor of the spectrum inventory because the way we're going to understand

whether there are folks who actually need to use something, and whether there is something to use, is to know whether it's in the market.

And this whole argument about whether there is enough or not is a little bit beside the point. The point is, in any particular business case, there may be a need for spectrum to do X, Y, or Z if we have the ability to understand where that spectrum is.

Perfect information means a perfect market, no information means no market. We need the information out there, so that the market can work. Then we will really understand and see where these uses are workable. And we then have to get into a flexible use kind of regime in order for this to be successful.

My radical idea from years ago was the federal government ought to be using a market-based way of actually allocating their spectrum. If we were to get those principles embedded on the federal side as well, that might actually clear up some issues around whether there is a shortage, and how this spectrum ought to be used for the highest and best purpose.

MR. HONIG: When you talk about making spectrum available it's a question of timing. Figure a year for the rule-making, a year for the court appeal, another year for the remand, and a year for ITU coordination, plus another year as a fudge factor, because everyone forgets there is an election.

Go five years into the future, look at what the projects are for and how much demand there is going to be. No one doubts that after five years the answer is, "It's so large that we don't know how many zeroes there are."

The question then becomes, "What if we make a mistake? Do we

want to make the mistake erring on the side of let's not have enough? What happens is we're faced with a scarcity regime?" We all know what happened with *Red Lion* and with *Ashbacker*. We don't need that for this new opportunity for economic growth. We just need to be sure that, if we make a mistake, we err on the side of abundance.

MS. SCHATZ: Blair, did you want to take that?

MR. LEVIN: I'll just follow up on that by saying that at the beginning of the dialogue within the Broadband Plan, we asked a bunch of different kind of questions that would help us think about things. One question was: What is the biggest risk to the broadband ecosystem in the United States in the year 2020?

If in the year 2020 we are at a spectrum disadvantage in terms of the amount in the commercial marketplace relative to our competitors, it means that on probably the most important platform for the distribution of all kinds of goods and services, both the it will be like having all of our roads have lots of potholes, but also be toll roads, where there is an extra cost and a diminution value that would definitely hurt the economy.

So, we started looking for mechanisms so that the market itself could adjust. And what I found amusing about the NAB criticism of cable was that it didn't understand what we're talking about is enabling people to respond to the markets. It could well be that there is a technology that makes spectrum worth less. If so, then incentive options take on a completely different character. On the other hand, somebody invents something that we hadn't thought of that requires a lot

more.

So, it's really exactly about what folks here have said. It's the timing of the thing, and making sure that our economy is not hurt in ways we can't anticipate 10 years from now.

Very quickly, it may be historically the best thing that Reed and I got to work on, or got to do, was to have a date certain. The day we arrived at the FCC in 1993, the end of the digital television transition would have been 2023. And that was a soft deadline. The point is that's where 4G is going to be for the United States. But we had no idea that that was what was going to be. We just knew there had to be a deadline.

So, my theme of this panel is we need deadlines.

MR. SUGRUE: I was just going to add that other countries around the world are allocating and assigning significant blocks of spectrum.

Germany, which is the home country for our parent company, last year auctioned off about 350 megahertz of spectrum, and they did a big auction of their so-called digital dividend, their broadcast spectrum, some 3G spectrum that was returned, and their 2.5 spectrum, and then some cats and dogs. But it added up to 350.

The U.S. had really just sort of caught up with the rest of the world in about the last year or two in terms of total amount of spectrum allocated for commercial wireless. And now we're well behind again. At least that's a sanity test. It's not some sort of strange thing going on here.

The other thing I will add is that these devices that people carry

around now are just sucking up bandwidth. From a network management point of view it's just really a challenge to keep up with the demand.

Just talk to our CTO, who is responsible for our network. He tells me that three years ago, when this was the dominant sort of smart phone thing, these things used 20, 30, 40 megabits a month. Now our smart phones are using, on average, a gigabit, a month. That's more than an order of magnitude difference.

So, you build the networks, you get the spectrum, and the demand. You can call it a virtuous cycle sometimes. When the bandwidth is there, they build devices to use it. Then the app writers write these great apps that will work on it. But from a network point of view, it's a vicious cycle, because you can never really keep ahead of the demand. So spectrum is a critical ingredient there.

Our view on build-out requirements has changed, as a result of some people not building out their spectrum as quickly for apps as we would, if it was on the market. So I realize, as an economic theory, build-out requirements are not a good thing. But in practice, we may support them.

MS. SCHATZ: Okay. So let's turn to incentive options, then. If we're to assume that Congress actually passes legislation that would allow the FCC to do incentive options, what should they look like? How would you actually set them up?

If you were in charge of it -- and, Paul, I guess you kind of are --

(Laughter.)

MS. SCHATZ: But for everyone else, what would you do? And it's open to the entire panel. Yes?

MR. DE SA: I'm going to listen.

(Laughter.)

MR. DE SA: I'm taking notes.

MS. SCHATZ: Blair, would you like to start?

MR. LEVIN: I want to reiterate Paul's point. There is a lot of work that is not apparent to the public about this stuff that has been going on while other parts of the Commission were dealing with other issues that will remain nameless.

When we started kicking incentive auctions around with the Bureau back in the summer of 2009, the great auction geniuses who came up with the multi-round simultaneous auctions that we did back for the A and B-block in 1994 and 1995 had a lot of really great ideas.

I don't think the Commission has yet gone public with them, and I'm not going to wreck that. I will just say that I have a high level of comfort that there are strategies using the most sophisticated, Nobel Prize winning theories that are, nonetheless, doable, achievable, very smart, and depending on the economics, will succeed. And if they don't succeed because the current economics mean that the value of the spectrum is not greater than the value of the ongoing enterprise or the alternative, that's perfectly fine.

The situation that we really want to avoid is the situation where somebody owns spectrum, where the spectrum itself is worth way more than the value of that enterprise, even to that person, but there is no way to get benefit by giving it back because it's still more valuable to keep it. We don't want that situation in 2020.

MR. SUGRUE: The big focus is on the broadcast spectrum, but there should be general authority. MSS might be the first application. There is no reason to even limit it to specific bands because there could be opportunities in areas we're not focusing on right now.

I was talking with Evan Kwerel, who is the economist and expert on auctions at the FCC. He had an idea where the people who are offering their licenses participate in a Dutch auction where you start with a very high price that you sell here, sell there, and that generates a supply curve. Then the people who want to buy it bid up. That generates a demand curve. And when those two cross, voila.

It looked great in theory. I didn't really internalize it. But things like that are very fruitful. And we'd have to work them through to see if they're doable. It may not be practically doable. But there are a lot of good, smart people looking at that issue right now.

MS. SCHATZ: David?

MR. HONIG: We certainly had a lot invested in DTV. We brought the set-top vouchers to the Commission, they adopted it. So it worked. But now, a few years later, we realize, looking at these things as you have to every new year with a new set of eyes, that that spectrum, for the most part but not entirely is going to be more valuable to the public if it's used for wireless. So, for the broadcast companies that's great if it's voluntary, it's another opportunity to monetize their asset, if we choose to.

But the question that broadcast companies have raised is: How do

you make sure that it's always going to be voluntary? The answer to that is you can't and shouldn't. The Commission does have the ability to trot out section 304. Remember the rights to the ether? No squatters' rights? It is a last resort. But the Commission should never concede the possibility that, should it be necessary to do so, it does have the ability and could use it to get the spectrum repurposed in the national interest.

MS. SCHATZ: Kathy?

MS. BROWN: To everyone's point here, if there indeed are mechanisms, smart ideas, we do have to start getting them on the table, candling them against actual business realities, and figure out a way that buyers and sellers can actually get comfortable with what this might look like.

Let's start to really think about the details. I assume there is more than one model, and I assume that it's worthwhile to get them up on the white board and starting to actually take a hard look.

MR. DE SA: You will see some more specific ideas coming out about exactly how to run this. It's obviously a very difficult thing to organize.

MS. BROWN: We all have to just start by saying this has not been done before. So we have to figure it out. But that means we want some multiple ideas on the table, and then at least some discussion about what can be successful.

MR. DE SA: That's right. One principle for us is that everyone thinks it's not talked about very much. Part of the point of incentive auctions, obviously, is to be able to share the proceeds with people who are voluntarily contributing spectrum. The other part is that there is a value-add role for the

auctioneer in the middle, in terms of creating contiguous blocks on the broadcast side, contiguous from the frequency perspective, contiguous from the geography perspective.

Notwithstanding just the huge value gap, with respect to potential uses of the spectrum, there is a huge amount of value that can be added through the mechanism, if the mechanism is designed properly, to the spectrum that's coming in before it goes out.

Part of our core design principle is figuring out how to maximize that.

MS. BROWN: I am also very concerned about The Long Now, if you will. We were so sure that the broadcasters would have five channels, that they were going to build out HDTV all over the entire universe, and that this is what this stuff was going to be used for when we started way back when. Well, that's not what the market bears. And now we have to go through this entire wrenching reallocation again, because the market did something that wasn't anticipated.

So, as we think about this, I hope we're also thinking about the next thing, and whether, in fact, we can keep the market dynamic.

MS. SCHATZ: So, if we're talking about auctioning off a lot of spectrum -- and since our friends from AT&T are also in the room -- I wanted to bring up the idea of spectrum caps.

If you're going to auction off all this spectrum in the future, should you also have caps in place to ensure that the Verizons and the AT&Ts of the world don't just buy it all up, and so that other smaller carriers can't increase their

spectrum position?

Tom, you want to take this one?

(Laughter.)

MR. SUGRUE: The spectrum cap order did not say that the Commission would be indifferent to aggregation by major players in spectrum auctions or in mergers.

Indeed, in mergers what it said was we want to get away from a hard and fast cap and evaluate this on a case-by-case basis. It does that in a merger. It does order divestitures, not usually too heavy, but nevertheless the concept is there. They have a screen, and you can go through it. If you're over the screen then you get a close look, and if it looks like it's too much spectrum, they will be ordered to sell off some of the licenses.

It hasn't done that case-by-case approach yet in the auction context. Frankly, going forward, it should because, first of all, it said it would do so. And then, secondly, on a case-by-case basis, there may be reasons that you want some aggregation.

In that German auction I talked about, our parent company was one of the incumbents. And the German regulator limited T-Mobile Germany and Vodafone, who were the two largest, in terms of the amount of lower-band spectrum in their version of 700 megahertz they could get, because they didn't want them to buy it all, and it left some of it for others. So some things like that are possible. I couldn't address exactly what they should be.

And the rules would have to be adopted before the auction. In

theory, part of that sort of suggests that we can look at who wins it, and then decide. But trying to undo an auction after it's over would be a terrible mess.

So, that has to be on the table. But again, I don't know that we would support a version of the spectrum cap which said, "This number and no more," as a priority.

MS. SCHATZ: Kathy, I'm assuming you're not going to want that on the table.

MS. BROWN: Well, let me see. One, I learned my spectrum theory from Blair and Reed. The whole idea was that you create a market so that the players who can make the best and highest use actually build the stuff, and have the ability to do that, are the ones who win these things. It's been a fairly successful theory.

Two, it was Tom and I who worked on taking spectrum caps off, with just the theory that Tom laid out, that there is existing law as to competition. But I find this very interesting, too, because what should it be a concentration of and about in a marketplace? And I think we don't have this right. We just don't have it right. So, we have to rethink what it is we're worrying about, in terms of any sort of competition issues.

And, third, it just seems way premature to be talking about it.

MS. SCHATZ: David?

MR. HONIG: There is another aspect to this, and that is that since 1993 Congress has wanted the Commission to promote small business ownership. It has recognized that from small businesses -- and including minority and

women-owned businesses -- innovation often flows. And the mechanism that it set up was designated entities.

Until 2006, when the Commission changed those rules, designated entities were doing fairly well in these auctions. Then, among the rules that it changed was one that said if you change ownership within 10 years after you get this spectrum, you have to reimburse the government. No one writes a business plan that says you can't sell the company in 10 years.

So, not surprisingly, designated entity participation in auctions after that went close to zero. Those decisions were reversed by the court recently, and it's on remand.

If the Commission were able to restore a meaningful opportunity for designated entities, small businesses, innovative businesses to participate in and get a foothold in spectrum and trying new ideas, we probably wouldn't need spectrum caps.

MS. SCHATZ: Paul, what's the FCC's perspective on this?

MR. DE SA: I'm not sure I can speak for the FCC. I will tell you my perspective on it.

The debate about spectrum caps that I've observed over the last few months is entirely predictable. Where everyone stands is completely obvious, and you don't really need to have a two-hour *ex parte* to decide it.

The fact is there are factors on both sides. People come in and talk about bad decisions that Blair has made in previous auctions, and then how you shouldn't compensate the current holders for that spectrum. People talk about

foreclosure value. Clearly, if you have a lot of spectrum, there is some value in foreclosing your competitors from getting more. People talk about the competition policy. These are all important factors to consider.

I agree with both Tom and Kathy. The dominant factor is: How big is the pie? There is a big difference between having a discussion on spectrum caps in 10 megahertz versus spectrum caps when you're thinking about 100 megahertz.

It probably is a premature discussion to be having in the abstract. It's probably more important to think about it in the context of specific auctions, when we have a better sense of what the supply side looks like.

MS. SCHATZ: Okay. I have one more question. Then I'm going to open this up for questions. And there is a microphone on either side. So if you want to start lining up, we've only got one more up here. Although I have other questions, if nobody has any out there.

So, Larry, you've gotten off pretty easy here. It would be remiss of me not to ask about this little swath of spectrum that you all talked about this week, saying that you thought DoD might want to give back so that it could be auctioned off. Could you talk a little bit about the response you've been getting from other government agencies about this idea of reusing their spectrum?

MR. ATLAS: First of all, you're killing me. It's 95 megahertz, so it's not a little swath. It's a significant swath.

We, along with the FCC, identified in the plan 2,220 megahertz of spectrum that could be shared by commercial and government, or possibly be allocated from commercial to other commercial uses, or from government to

commercial use. And when we did the plan, we realized that if we tried to analyze each of those bands simultaneously, we would spend 10 years analyzing things, and not make any spectrum available.

We decided we needed to prioritize, and we looked at a variety of bands. Basically, what we were searching for were bands where there was a large, contiguous block, where there was favorable international allocations, where there was existing wireless technology. So we weren't talking about R&D on the commercial side, where the location of the band, from a technical perspective, was low enough so that it was valuable on a commercial side.

From the government side, what's the cost to reallocate? Are there bands where you could move existing federal operations? From the federal side, it's not a question of preserving spectrum. It's a question of preserving federal capabilities and operations.

So, when you combined all that together, this was a logical band to look at. And there was a great deal of consensus about doing that, including from federal agencies who were incumbents in the band.

That process is starting now. It will take until September. It's very complicated, because not only do you have to figure out, what the relocation plan is, but where would folks go, and what would it cost to get them there. In the current budget environment, the chief concern, beyond preserving capabilities, is where is the money going to come from now to do the planning and the pre-move work that needs to be done?

That will all take place between now and September.

MS. SCHATZ: So have you heard back from DoD yet about this, or is that part of the comment process? How does that work?

MR. ATLAS: DoD was part of the decision process. The decision process was a recommendation from what we call the policy and planning steering group, which is an inter-agency group that DoD is part of. And they agreed, along with other incumbents in the band -- DoJ and others -- that this band should be studied.

The industry was really most interested in the bottom 25 megahertz of this band for possible pairing with AWS. But we decided collectively that it made sense to look at the entire band. What we didn't want to do was move agencies out of the bottom 25 megahertz of it, then decide the next logical place to go, in terms of additional spectrum, is in the adjacent band, and then we have to go through the time, energy, and expense of moving people again. So, there was a lot of support for doing the entire 95 megahertz at once.

MS. SCHATZ: Okay, great. Paul Kirby always asks better questions than I do, so I will give it over to him.

MR. KIRBY: I am Paul Kirby with *TR Daily*. That's what happened, of course, when you made the 1710 to 1755 band. Some of those people went to the 1755 to1850 band, and so then it clogged that up.

I have one question. You said, "We made X number -- we put that in the pipeline." The 115 megahertz is in the pipeline, but this 95 is not in the pipeline, it's under consideration. Is that right?

MR. ATLAS: Right. When I say it's in the pipeline, it's something

that we are looking at. The 115 is done, from our perspective. There was an additional 40 megahertz, set from 4,200 to 4,400 that we also said basically we couldn't do it within 5 years because it required international action, and that's also in the works.

So, this is something that is not reallocated, but yes, it's something that we're looking at.

MR. KIRBY: So the 40 is kind of done, pending ITU and others you're waiting on to even make those 40 available?

MR. ATLAS: We need to make that 40 available. There is also some question of what the actual use of radar altimeters are in that band that we're still looking at.

But we need to go ahead with the work. The process is so long and so infrequent that if you miss the work deadline you're set back another four years. So we wanted to go ahead at the same time.

MR. KIRBY: Is there any point in having any public workshops, or anything like that, as you look at the 1755 to 1850 band?

MR. ATLAS: We're still developing what we're going to do in that respect.

MR. KIRBY: Thanks.

MS. SCHATZ: Sir?

MR. DITMEYER: Steve Ditmeyer, Michigan State University. The European Commission has a number of programs that they run under the rubric of trans-Europe networks -- trans-Europe network for transportation, trans-Europe

network for energy, and of course, trans-Europe network for telecommunications.

I would like to hear from Paul or Larry whether you all deal with the European Commission on these matters, and whether there are any lessons learned from Europe on procedures or substantive issues that we need to either adopt or avoid.

MR. DE SA: I can say that we certainly do. We meet with the Europeans frequently, both at sort of the more formal ITU-type settings, and also bilaterally. Nellie Cruz was here just before Christmas to meet with the Chairman. So we have an active dialogue with the Europeans.

There are obviously best practices that can be shared and there are lessons that can be learned both ways. But always one of the perils of trying to import little bits of policy from one country to another country is you miss the entire context in terms of industry structure, consumer behavior, pricing, history, regulatory regime that sort of is the foundation for those little pieces. And so it makes it kind of difficult.

So, if I think about the trans-European networks, for example, a lot of the motivation for those, in general, was to unify the different countries in the European Union and try and make the European Union regulatory framework more tractable. That's not really such a relevant problem for us.

On the other hand, there are certainly lessons with respect to how they deal with the companies and how they think about the incentives for the next generation of networks that are relevant. Many of the things that we're doing -- the Broadband Plan, for example -- the Europeans put out their version soon afterward

with sort of very similar goals.

MR. ATLAS: On the administration side, there is a constant dialogue, both at a formal level, but frankly, also at a very informal level, as well, and an interchange of ideas that's very useful on both continents.

MR. BUSKIRK: Howard Buskirk, *Communications Daily*. I wanted to get back to the D-block, because I was really intrigued by that discussion, and the suggestion of some kind of deadline to deal with that.

I just had two quick questions. One, are we headed toward a stalemate here? Because it seems like we have all the ingredients of a stalemate, with Congress or parts of Congress pulling in different directions and the FCC and the Administration maybe at a slightly different place right now.

And then, secondly, is it at all clear that the FCC's proposal would be that public safety would be able to use the spectrum it already has for broadband, plus using other carriers' networks? But that solution won't work. In fact, public safety definitely needs the D-block. There are some who say that at the FCC they really haven't built a strong case yet.

MS. SCHATZ: Blair, you want to take that one?

MR. LEVIN: As to the question on the stalemate, you can place your odds. The point about the deadline is that a deadline forces action and you've got to give reasonable time. But whether you think there will be or there won't be action, a deadline --is a good idea. There is no harm to a deadline, and there is a lot of benefit to it.

As to the fundamental question of allocation, what you have pointed

to is the analysis that we ultimately came down to, which is that these things are all a combination of a lot of different inputs. And, to way, way, way over-generalize, our view was what public safety needs is not more spectrum, but they need money. So, auction the spectrum, give them the money.

But there are definitely things they can do if they have more spectrum. It's reasonable to say, if we're going to get a whole bunch more spectrum somewhere else that's going to be auctioned, take the money from that, and give it to public safety as a once in a generation thing.

These are all judgment calls. This is a classic capital allocation decision. Businesses do it all the time. And businesses argue about it internally all the time. I'm sure Kathy's company, the wireline and the wireless guys are arguing about it.

So, yes, we came out in a different place, but that's perfectly reasonable, and it's perfectly reasonable to come out in a place different than we came out.

Again, what I think is not reasonable is to say that there is some reason we shouldn't at some point say, "Okay, if Congress hasn't acted by this day, then we're just going to go ahead with the commercial auction."

MS. SCHATZ: David?

MR. SUGRUE: Yes, I just want to add on the first point I think it is good to have a deadline. And if presented properly, it wouldn't be a hostile act. It might even be a friendly act.

PARTICIPANT: (Off mic.)

(Laughter.)

MR. SUGRUE: That would become hostile very quickly.

This is sort of a compliment to Blair and to his team, but I thought the public safety broadband network plan in the National Broadband Plan, was just a terrific piece of work. And that's not just because we want the D-block to be auctioned.

In fact, at that time, it was assumed it was going to be auctioned and allocated. And the Plan was based on that assumption. But it addressed the technical points, it addressed capacity, it addressed cost.

In our case, we have had good success doing network sharing on the commercial side. For a long time we had a joint venture with a company that was called Cingular then, to provide service in New York and California, two major markets. It was with one radio network and then two back-ends. It split very quickly, and it was very efficient. We essentially shared the spectrum, shared the RF equipment, shared the cell sites. And it went away when Cingular acquired AT&T and didn't need it anymore, and decided, for strategic reasons, it wanted to take it down.

But those models would work very well. We have spent a fair amount of money researching this. We've got some very credible technical people who put papers in on how priority access works under LTE. And it's frustrating, because right now it's almost that the debate isn't about that. Instead it's more, "We want the spectrum, and we're going to get it."

There are more efficient ways to build public safety networks. New

York City put a paper in that showed it had 250 sites to cover the 5 boroughs. We have five times that, okay? But sites cost money. Spectrum is free to public safety. You've got to spend a lot of capital lobbying, and stuff like that, but it's free, in terms of dollars.

To us, spectrum costs and sites cost. So I would suggest we do perhaps a more rational allocation between the two. We have a much denser architecture than public safety does, and we also have more users on it. Total, public safety is three million, tops? Is it four million? We have 34 million. The industry has almost 300 million subscribers.

The President announced the goal of 98 percent wireless broadband coverage by 2016, and the last FCC competition report said that 98.1 percent of the population has at least 1 wireless broadband provider. So we won. We did it.

(Laughter.)

MS. SCHATZ: David?

MR. HONIG: The question was, is it possible for this to get bogged down, and to take forever, notwithstanding its importance? I think the answer to that is, if this becomes misperceived as an issue that those of us in this room care about and almost no one else does, as just an esoteric question of telecommunications policy, it will take forever.

If we think back, though, and paint the picture -- Why did we want this network in the first place? -- it's because in some neighborhoods it takes forever to get an ambulance or a fire truck to come through, because some kids coming home from school are not safe, because of where they live, and they don't

control that. And I think, as a nation, we have long ago reached a consensus that that's wrong.

I am one of those who think that the President got this basically right. But whether he got it right, or whether there is some other approach, we've got to keep our eyes on why did we want this, why did we need this in the first place, what ideals do we stand for? If we do that, this could move very quickly. And it should.

MS. SCHATZ: We're finished a few minutes early. So thanks very much to the panel. This has been great. Thank you very much for coming today.

(Applause.)

MS. SCHATZ: I'm going to turn it over to Randy, here.

MR. MAY: If you will just stay seated for one minute, I have just a couple housekeeping things. First of all, to thank Amy Schatz, our moderator. I fear I didn't give her a proper introduction, but let's thank Amy, as well.

(Applause.)

MR. MAY: As you know, Amy is the star reporter for the *Wall Street Journal* on the matters that we have been talking about, and other telecom matters. I don't know whether she takes notes while she's also moderating; that might be hard. So I'm not sure we will read all about this particular panel there. But we will be able to watch it on CSPAN.

Okay. Now, just two other quick things. First of all, when I heard Time Warner Cable mentioned in terms of the recent attacks by the National Association of Broadcasters, that made me remember -- not that I need to defend

Time Warner Cable -- but it jogged my memory that I posted a blog about this, as well.

Time Warner Cable has what I think is a very innovative and really useful program to further scholarship, in terms of addressing broadband policy issues. They have already been through one year and produced some good papers. The leader of that project, Fernando Laguarda, is actually with us. So all I want to do is say that you could look on the Free State Foundation blog and find out information about the application process, and so forth. It's a worthwhile program.

And then, finally, before we adjourn for the lunch -- I was just trying to remember whether Blair was linking Commissioner McDowell -- I think he is actually here somewhere, I don't know whether in earshot -- to Stalin or Lenin.

(Laughter.)

MR. MAY: Oh, okay.

MR. LEVIN: –(inaudible) I just wanted to have that correct. Again, thanks to that last panel and Amy.

And now we're going to adjourn to lunch. Thank you.

(Applause.)

(Whereupon, at 12:27 p.m., a luncheon recess was taken.)