RURAL WIRELESS BROADBAND

HEARING

BEFORE THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

MAY 22, 2003

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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

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RURAL WIRELESS BROADBAND

THURSDAY, MAY 22, 2003

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

The Subcommittee met, pursuant to notice, at 2:44 p.m. in room SD-562, Dirksen Senate Office Building, Hon. Conrad Burns, Chairman of the Subcommittee presiding.

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

Senator Burns. We will call the Subcommittee on Communications to order now and thank everybody for coming today and in particular the two principals in this issue and this is our first hearing.

ing.

The topic of today's hearing is the economic future of our nation, I believe, how speed of deployment in the wireless high-speed Internet access for rural America. The recent history of telecommunications aptly illustrates the demand and usefulness of wireless telecommunications access and the widespread wireless Internet access to rural America will be an even more beneficial service.

Today's hearing will focus specifically on the Landrieu-Sununu bill. How did you get your name first?

Senator Landrieu. Well, we had a long conversation about it. It was easy.

Senator Burns. Did she threaten you?

Senator LANDRIEU. He was a good partner to work with.

Senator Sununu. It was not a long conversation. She said, "It is my bill." And I said, "I am happy to help you with it."

[Laughter.]

Senator Burns. There was a time, you know, way back when Senator Conrad of North Dakota came across the floor and asked me to co-sponsor an amendment on the farm bill we were discussing. And I said, I would certainly support that. He says, good, we will call it the Conrad-Burns amendment. I said fine. He got halfway across the floor and came back and said, that ain't going to work.

[Laughter.]

Senator Burns. So that is good, though.

We will focus on that bill today, the Emergency Communications Competition Act, and I enthusiastically support it as an innovative approach to providing both competitive and multi-channel video and wireless broadband services to rural America. I also note that the bill has already gained the support of 16 co-sponsors, including several on the Commerce Committee.

Today's hearing will also address the implementation of the Digital Data Services Act, which I authored and which passed into law during the final days of the 106th Congress. The Digital Data Services bill created a pilot project which allowed certain low-powered television stations the flexibility to use their spectrum for wireless two-way high-speed Internet service.

This bill builds upon previous legislation that I authored, which was the Local TV Act, also, to help ensure that all local television stations, just not those with the largest markets, are available to consumers. As a former broadcaster, I know Montana has some of the smallest in the Nation. Of the 210 television markets, we rank from 169th down to 210. We have got the smallest one in our state and that is Glendive, Montana, over on the eastern plains.

Slowly, DBS operators are carrying more local television stations, but I am not crossing my fingers that they will ever get to Glendive any time soon. There are about a thousand other local television stations that serve larger markets and they are based on simple ec-

onomics which could and should be carried first.

There is one reason why we need this legislation. It will enable the rapid deployment of the new Multi-Channel Video Programming and Data Distribution Service, MVDDS. This wireless service is ideal for rural areas because it can be deployed anywhere. I commend the FCC for authorizing this new service. It not only promises to bring local channels to all markets regardless of size, but it will also provide broadband Internet access to rural Americans who have no such access today; and I expect the low cost of this wireless technology will translate into lower costs for consumers.

This is precisely the kind of innovative new technology we should encourage and promote. The injection of this new competition that this service will provide for broadband itself should lower the prices. We witnessed a dramatic reduction in rates when we got several cellular and PCS competitors into the marketplace. We need to promote policies that will bring about the same aggressive competition for broadband, particularly in rural areas. We must be on guard, however, to make sure that the new market entrants are not saddled with the costs that others have not borne.

That brings me to the next point. I am concerned that unless we pass this legislation we may never see the deployment of this new service. The FCC has determined that the licenses for this new service should be auctioned. I have long felt strongly that allowing short-term budgetary dictates to dominate spectrum policy often results in disastrous public policy judgments, which ultimately short-change both the treasury and the consumers.

I have made it very clear that I want to examine how the auction system is working overall. The public interest is best served when the spectrum is licensed promptly to applicants that are ready to deploy the service, not to the highest bidders that are ill-prepared to do so. While auctions make sense in many instances, this is not always the case.

Three years ago, Congress passed the ORBIT Act, legislation that I authored which in part exempted from auction spectrum

used for the provision of international or global satellite communication services. The legislation which we are examining today is narrowly confined to how the FCC is going to issue licenses for a

specific frequency band, the 12.2 to 12.7 gigahertz band.

In the 12 gigahertz band we are confronted with a case of first impression in which the FCC has determined to issue licenses to both terrestrial and satellite applicants that share the same spectrum. Previously this was thought to be technologically impossible. In my judgment, the same Federal resource must be licenses and the same manner for all applicants regardless of the technology which they will employ. To do otherwise is to pick industry winners and losers. The wireless buildout bill before us today corrects that problem.

I think it is also something that we should always take note of whenever we start making policy here with regard to spectrum or anything else in the telecommunications industry. Number one, we must do no harm; and number two, we must make it technologyneutral, and that allows new ideas, new services, new things, to

progress.

I now recognize my good friend from New Hampshire, Senator Sununu.

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

Senator SUNUNU. Thank you very much, Mr. Chairman. I appreciate you convening this hearing and very much appreciate your remarks, especially with regard to the importance of maintaining an equitable approach with regard to the way we treat spectrum and the use of spectrum and the licensing of spectrum and of course maintaining a balanced approach and a fair-minded approach in the application of technology and being careful not to bias our markets or our regulatory system toward one technology or another.

This is an important issue and I believe a very worthwhile piece of legislation. It is a piece of legislation in which we see the intersection of a number of new technologies and new ideas for terrestrial DBS. We also see a technology that can meet a very important need, a need that is out there, that we hear about every day as members of the U.S. Senate, a need of rural access to broadband, rural access to broadcast services.

Finally, this obviously deals with the issue of utilization of spectrum, using spectrum in a way that is in the public interest, in a way that will make a difference, and using spectrum in a way that

maximizes the efficiency in the process.

I think that the bill accomplishes those things, but I look forward to hearing issues, concerns that might be raised regarding its implementation. If there are ways that we can improve and strengthen the legislation, I am of an open mind and I think other members of the Subcommittee are as well.

Thank you again for this hearing and I look forward to the testimony of the witnesses.

Senator Burns. Thank you, Senator Sununu, and we thank you for your leadership on this, on this particular issue.

Now we welcome to the Committee, Senator Landrieu of Louisiana, and we thank you for coming today.

STATEMENT OF HON. MARY L. LANDRIEU, U.S. SENATOR FROM LOUISIANA

Senator Landrieu. Thank you, Mr. Chairman. First of all, thank you for calling this hearing on this very important matter and for your comments and your support of the general direction in which the legislation that I have authored, sponsored with Senator Sununu, is moving forward. He is an excellent partner and we, our states, although in different parts geographically of the Nation, share some similar characteristics—the rural nature of some parts of our state as well as Montana. We can speak to this issue representing areas that are having trouble not just with price and access, and this legislation that 16 Senators have co-sponsored and

that is the subject of this hearing today seeks to remedy.

I would like to submit my full testimony, Mr. Chairman, to the record and also submit an excellent article in the Tech section of the Post this morning, the summary of which is "Why Is Broadband's Spread Slowing?" It is because access is limited and price is not competitive. The legislation that we sponsor is some-

thing that will correct both of those points.

Senator Burns. Without objection, all of that will be made part of the record.

Senator LANDRIEU. Thank you.

In addition, Louisiana has a fairly large rural population and relative to our overall population it is much higher than the national average, which is 21 percent. Ours is 32, which is one of the reasons that I am before you today.

In addition, cable rates are up 9.1 percent compared to the overall inflation rate of 2.5. There have been many, many studies on this issue. One that I just want to cite for the record is a GAO recent report that cable systems face competition. Most do not, but when they do, rates are lower by 17 percent.

The new technology that we are asking just to be placed on a level playing field, not given any added advantage, would provide competition everywhere, saving consumers billions and reaching the rural areas of this nation, who are also entitled to accurate local information as well as emergency information along with our urban areas.

There are 210 local markets. There is no local television in 134 of those markets, no local TV in eight states. The Chairman is aware that one of those states is Montana. The other ones are Alaska, Maine, and North Dakota. Rural areas, as I said, are also ill served by the current broadband situation because they either cannot get it or they cannot afford it.

This new technology that our bill hopes to again promote would improve emergency communication. It would disseminate Federal, State, and local emergency alert system warnings to all subscribers. Also, of course, with the recent Federal legislation, on amber alerts it would be available to not just urban communities

but to all communities in the Nation.

The most important thing, regardless of your views on auctions and I am actually sympathetic and feel, as you do, Mr. Chairman, and as you do, Senator Sununu, about the disadvantages of auctions. But whether you are on one side or the other of that argument, no one can be against a level playing field for everyone. This legislation that I am putting forward would provide, or that we are putting forward, would provide a level playing field to all those that can offer this type of service. So again, it is about competition, it is about lowering price, it is about consumers, it is about rural areas, and either we require all applicants for particular spectrum to go to auction or none of them. But this situation where we have some going through auction and others not and then having the rural areas and the consumers pick up the tab for that seemingly bifurcated policy is not I think what we should be doing.

So I thank you for your co-sponsorship. There is a tremendous amount of interest, Mr. Chairman, in this issue and I think this hearing is quite timely, and I thank you all. Whatever the bill is called, as long as it passes that is what the most important thing

is. So thank you all very much.

Senator BURNS. Thank you, Senator Landrieu. I have no questions for the Senator.

You may join us up here if you like and we will start listening

to the witnesses that have been invited to testify today.

Senator LANDRIEU. Thank you, and I will stay for a few minutes and then have to get back to another meeting. But if there are any questions or comments?

Senator Sununu. Thank you very much.

Senator LANDRIEU. Thank you.

Senator Burns. You are welcome to do so.

Now we call the panel. We have a panel, only one panel of five people: Ms. Antoinette Bush, Executive Vice President, Northpoint, here in Washington; Mr. Andrew Wright, who is President, Satellite Broadcasting Communications Association of America; Mr. Harold Kirkpatrick, President and CEO of MDS America; Mr. Thomas Hazlett, Senior Fellow, Manhattan Institute of Policy Research; and Mr. Larry Roadman, President, Margaretville Telephone Company, from Margaretville, New York.

We will call on—it is nice to see you back again.

Ms. Bush. Thank you.

Senator Burns. We will call on Ms. Bush for your testimony now, please.

STATEMENT OF ANTOINETTE COOK BUSH, EXECUTIVE VICE PRESIDENT, NORTHPOINT TECHNOLOGY, LTD.

Ms. Bush. Thank you, Mr. Chairman, for inviting me to testify before you today. It is a pleasure to be back before the Committee, albeit in a different seat.

Senator Burns. How does it feel down there, by the way?

Ms. Bush. It was more fun up there. I want to applaud you for holding this hearing. Wireless technologies are ideally suited to address the challenge of serving lightly populated, but geographically large areas with advanced communications services.

large areas with advanced communications services.

Northpoint has a patented technology that makes it possible for satellite and terrestrial users to share the same spectrum without causing interference. Northpoint has six patents issued and others pending. Northpoint intends to offer consumers multi-channel video programming, including all local channels, at the rate of approximately \$20 per month and a broadband package also for \$20 a month. We aim to be a national provider and are committed to pro-

viding the same quality of service in all markets throughout the United States.

Too many rural Americans cannot get the same level of service that is offered in urban and suburban communities. Many cannot get access to a cable system and DBS is woefully deficient in carriage of local television stations and emergency alerts. Consumers in rural areas need services and choices which terrestrial wireless

can provide.

With cable rates soaring at three times inflation and with broadband unavailable or too expensive for most families, why are consumers still waiting for this technology? The FCC licensing process is broken. For decades the U.S. licensing system was based on the limitations of analog systems and the assumption that satellites and terrestrial systems cannot share spectrum.

Since 1994 Northpoint has spent millions of dollars proving that our technology can co-exist with incumbent satellite services and seeking licensing rules that treat terrestrial applicants in the same manner as satellite competitors. Last month the FCC rejected the last challenge from the DBS industry on the technical rules.

Let me state for the record that Northpoint does not oppose spectrum auctions in general. When spectrum is available—when available spectrum will not accommodate multiple qualified applicants, auctions can be an efficient means to allocate licenses. In the case of MVDDS, Northpoint and seven other satellite applicants filed applications on the same day for the same spectrum. The FCC subsequently concluded that all eight of us could share the same spectrum. Thus there is no mutual exclusivity or no basis for an auction under the Communications Act.

Why, then, is there an auction? The FCC has different rules for processing satellite versus terrestrial applicants. Satellite applications are called for during a rulemaking process and the applicants are then afforded the opportunity to work out the sharing to figure out if they can share the spectrum. For terrestrial applications, the applications are called for after the rulemaking is completed and typically the rulemaking concludes that there should be an auction for the licenses and the applicants are not then afforded an opportunity to see if they can share the spectrum.

Then, a year after our applications were filed, Congress enacted the ORBIT Act, which exempts from auction spectrum used for the provision of international satellite services. Congress could not have realized that the FCC would interpret this provision as prohibiting an auction of the pending satellite applications, but requiring an auction for the pending terrestrial application in the same

proceeding.

The competitive disadvantage to terrestrial applicants is obvious. They will be subjected to costs not borne by their satellite competitors. The regulatory status quo favors one technology over another.

We are thankful that Senator Landrieu and Senator Sununu introduced legislation to end this inequality. We thank all of the members of the Committee who have co-sponsored this measure.

A constant refrain we hear from our opponents is that Northpoint ought to pay for spectrum. The issue, however, is that the rules changed in the middle of the game. Our competitors were exempted from auction after our applications were filed. The satellite applicants with whom we applied on the same day to share the same spectrum include Hughes, DIRECTV's parent, Boeing, Alcatel. These multibillion dollar companies have a huge competitive advantage over terrestrial applicants now that they are getting their spectrum without auction. The ultimate result is that terrestrial wireless customers will have to pay more for service than the customers of these satellite companies.

Hughes in fact has never participated in a spectrum auction. This year, EchoStar teamed up with a Gibraltar company that has access to a U.S. DBS slot to provide DBS service in the United States through that Gibraltar license without an auction. Another company teamed up with a Canadian company that has a satellite slot that serves the United States. Again, they were given permission to provide service in the United States without an auction. And in 2001 the FCC awarded nationwide auction-free licenses in what is called the DBS expansion band to 11 companies, including Hughes and Pegasus, who will be our direct competitors in the service we want to provide in the multi-channel video marketplace and Internet marketplace.

I do not fault the satellite companies for getting their licenses without an auction. I simply take grave exception to their efforts to deprive us of getting the same treatment. We do not seek to be licensed on terms more favorable. We seek merely to be licensed on the same terms as our satellite competitors.

Many people do not know that cable systems also have tens of thousands of licenses, none of which were purchased at an auction. Again, I am not faulting the cable industry, just noting a fact. We are expected to be a price competitor with cable, but they are getting their spectrum from the U.S. Government on more favorable terms than we would be afforded.

In closing, I want to make two observations. First, in a striking contrast to the MVDDS auction, this year the FCC expressly rejected calls to auction spectrum for terrestrial use in the mobile satellite spectrum.

Second, I think it may be useful to contrast our regulatory efforts to those of the Wi-Fi industry, a flourishing technology that burst on the scene in the last couple of years. It is estimated that Wi-Fi revenues will reach over \$5 billion by the year 2007. Wi-Fi's success is evidence of what happens when government regulation is not a barrier to entry or to innovation.

If we are privileged to be licensed, I can assure you that we will deploy our service across the United States, including Alaska and Hawaii, within 2 years. We are not opposed to the licensing of other MVDDS operators. Any company that can demonstrate that its technology will not cause harmful interference to DBS as required by the law should be eligible for a license. This legislation that we are supporting only requires that that license cannot be awarded by auction.

S. 564 will ensure that all terrestrial and satellite operators will be licensed in a like manner. Implementation of this principle will jump-start the successful deployment of MVDDS, enabling consumers, urban, suburban, and rural, to receive the benefits of an

innovative new service and lower prices.

Thank you again for letting me testify. I am happy to answer any questions you might have.

[The prepared statement of Ms. Bush follows:]

PREPARED STATEMENT OF ANTOINETTE COOK BUSH, EXECUTIVE VICE PRESIDENT, NORTHPOINT TECHNOLOGY, LTD.

Thank you, Mr. Chairman, for inviting me to testify before you today. I also want to thank all members of the Committee for giving Northpoint the opportunity to appear in support of S. 564, the Emergency Communications and Competition Act.

I. The Northpoint Technology Is Uniquely Suited To Serving Rural Areas

First, I want to applaud you for holding this hearing to highlight how wireless technologies can address the needs of rural populations. Indeed, wireless technologies are ideally suited to address the challenge of serving lightly populated, but

geographically large, areas with advanced communications services.

In 1994, Northpoint's founders invented a wireless technology that makes it possible for satellite and terrestrial users to share the same spectrum, at the same time, in the same place. In essence, Northpoint found a way to reuse spectrum that was previously assigned to satellite users on a non-interfering basis. Although much attention has been focused on Northpoint's business plan to provide video and data services in competition with both DBS and cable in the 12.2–12.7 GHz band, this technology can be used in almost any spectrum band currently allocated to satellite use. Northpoint has six patents issued and others pending.

In the DBS band, Northpoint proposes to provide multiple channels of video programming and high-speed broadband service to consumers at low prices: \$20 per month for the video package (including all local channels) and \$20 for the broadband package. Our locally-deployed systems will have ample capacity to carry all local television channels and other local community programming and provide a robust broadband service. We aim to be a national provider and are committed

to provide the same quality of service in all markets, regardless of size.

Too many rural Americans cannot get the same level of service that is offered in urban and suburban communities. Many rural Americans cannot access a cable system, and while DBS does an excellent job of closing the gaps to reach remote households, satellites are woefully deficient in carriage of local television stations and broadband. In fact, today there are over 1,000 local television stations that are not carried by either EchoStar or DIRECTV. DBS does not provide any local channels in 134 markets and no channels in eight entire states. In addition, consumers watching DBS will not get Emergency Alert System warnings in most markets. In contrast, MVDDS will carry these time-sensitive warnings everywhere.

This Committee is also well versed in the limited broadband service that is available to rural America. There is a clear need for new broadband providers in rural areas, and Northpoint's wireless broadband technology is well suited to provide a cost effective solution. Our technology is low cost and easy to deploy. The consumer equipment is also low cost and readily available in the market today. Like Wi-Fi, Northpoint provides a technology-based solution to address consumers' needs.

In all markets, there is a clear need for additional competition in the multichannel video programming distribution and broadband markets. The FCC and the Justice Department have recently documented the absence of competition in the multichannel video industry. Even with two DBS operators and one cable operator, consumers are still paying very high prices for service. With cable rates soaring at a pace three times greater than the rate of inflation, and with broadband access unavailable or too expensive for most families, why are consumers still waiting for the opportunity to use Northpoint's revolutionary technology?

II. The FCC's Licensing System Unfairly Discriminates Against Terrestrial Systems

The FCC licensing process is broken. For decades the U.S. licensing practice was based on the limitations of analog systems and on the erroneous assumption that satellite and terrestrial technologies cannot share the same spectrum. In the past decade, Northpoint has spent millions of dollars proving that our technology can coexist with incumbent and planned satellite services. We also have sought licensing rules that treat terrestrial applicants like us in the same manner as our satellite competitors.

At first, we were stuck in a Catch-22: we had to conduct tests to prove that our technology didn't cause harmful interference to satellites, but the satellite companies strenuously opposed our requests to carry out those tests on the ground that

the technology was unproven and the tests were bound to cause interference. We finally received the necessary experimental license in 1997 to test in Kingsville, TX. We conducted two more tests in 1998 and 1999, in Austin, TX and Washington, D.C. There has never been a single DBS customer that has come forward to complain of interference.

In 1998, a subsidiary of the French company Alcatel filed an application seeking a license to operate a non-geostationary satellite orbit (NGSO) system in the DBS band. The FCC also called for other satellite applications but not terrestrial applications. Northpoint recognized that terrestrial operations would be foreclosed if it did not step up and file an application along with the seven satellite applicants in early 1999.

A year later, while the eight applications were pending, Congress enacted the ORBIT Act, a provision of which exempts from auction "spectrum used for the provision of international or global satellite communications services." Congress could not have realized at the time that the FCC would interpret this provision as prohibiting an auction of the NGSO applications but requiring an auction for terrestrial applicants.

In late 2000, based chiefly on Northpoint's extensive experimental record, the FCC determined to create a new Multichannel Video Distribution and Data Service, or MVDDS, that would share the 12.2 12.7 GHz band with satellite operators.

That same year, at the request of the DBS industry, Congress included a provision in the LOCAL TV Act that directed the FCC to retain an independent firm to conduct an independent test of the terrestrial technology proposed by *any* applicant that wanted to share spectrum with DBS satellites. We actually supported the enactment of that law, because it provided that the testing would be done promptly and we were fully confident in our technology.

Northpoint was the only company to submit equipment for that statutorily mandated test in early 2001. The MITRE Corporation, which conducted the test, concluded that satellite-terrestrial spectrum sharing is indeed feasible. Subsequently, the FCC adopted technical rules based on the Northpoint technology, citing the MITRE testing.

On April 29, 2003, the FCC reaffirmed its prior decisions that MVDDS and DBS can share the same spectrum. The eight year effort to prove our technology to the FCC has succeeded.

The licensing process is still not complete, however.

Let me note for the record that Northpoint does not oppose spectrum auctions in general. In ordinary circumstances, where you have more applicants than spectrum available, auctions can be a legitimate and efficient means to distribute spectrum licenses.

But auctions in the context of this proceeding are not appropriate.

First, Section 309(j) of the Communications Act requires auctions only in those cases where "the Commission accepts mutually exclusive applications."

In the FCC proceeding involving the Northpoint and NGSO systems, Northpoint and seven other satellite applicants filed applications on the same day for the same spectrum. The FCC subsequently concluded that all eight can share that spectrum with each other and with the two incumbent DBS operators. As a preliminary matter, there is no mutual exclusivity and thus no basis for an auction under the statute.

Some would wonder, why then is there an auction? Well the key words in the statute are "accept for filing". The FCC never accepted the Northpoint applications, but it did accept the seven satellite applications. Why the difference in treatment? The FCC has different rules for processing satellite versus terrestrial applications. Satellite applications are called for *during* the rulemaking process, thereby giving the applicants an opportunity to resolve mutual exclusivity. Terrestrial applications are called for *after* the rulemaking and the terrestrial applicants are not afforded the same opportunity.

This institutional difference in treatment had never caused any particular problem before, because until Northpoint came along, satellite and terrestrial operators were never attempting to use the same spectrum resource at the same time.

Now, however, the competitive disadvantage this causes terrestrial applicants is obvious. Terrestrial companies will be subjected to costs not borne by their satellite competitors. The regulatory status quo favors one technology over another. Consumers should be the ones who determine the technology that best serves their needs, not government. We are thankful that Senators Landrieu and Sununu introduced legislation to end this blatant inequality. And we thank all the members of the Committee who have cosponsored this measure.

III. Northpoint Is Not Seeking Special Treatment; It Is Seeking A Level Regulatory Playing Field For All Terrestrial Applicants

A constant refrain we hear from our opponents is that Northpoint ought to be willing to pay for the spectrum. The issue is that the rules changed in the middle of the game: our competitors were exempted from an auction after the applications were filed.

I've already mentioned the satellite applicants with whom we applied on the same day for the same spectrum, and who will be getting their licenses without an auction. These companies include Hughes (DIRECTV's parent), Boeing, Alcatel and others. These multi-billion dollar companies were given a huge competitive advantage that was not afforded terrestrial applicants. The ultimate result is it will cost consumers more for our service if we are forced into an auction.

Indeed, Hughes has never participated in a spectrum auction. This year EchoStar teamed up with a foreign satellite company that has a full-CONUS slot, to get even more auction-free spectrum capacity to serve its U.S. subscribers. And Canadian satellites have now been authorized to serve the U.S. market, also without auction. In 2001, the FCC awarded nationwide auction-free licenses in the DBS Expansion

In 2001, the FCC awarded nationwide auction-free licenses in the DBS Expansion Band to eleven companies, including Hughes and Pegasus. They will be our direct competitors.

I do not mention these facts in an effort to fault the satellite companies for getting the licenses in the manner they did. But I do take grave exception to their efforts to deprive us from getting the same treatment. We do not seek to be licensed on terms more favorable than satellite companies; we seek merely to be licensed on the same terms

The FCC's Flexibility Order allows mobile satellite system operators to use their satellite licenses to operate an ancillary terrestrial system. The FCC expressly rejected calls to conduct an auction for the terrestrial use of this satellite spectrum. This presents a striking contrast to the MVDDS auction.

Some might note that there is a DBS auction scheduled for August of this year. We do not believe that the auction can legally go forward, given that the FCC concluded several years ago that DBS is an international satellite service, and thus should come within the ORBIT Act prohibition on auctions of orbital locations or spectrum used for the provision of international or global satellite services. Moreover, the particular DBS slots that are up for auction are, with one exception, the "rejects" of the incumbent DBS operators and they are all "wing" slots which are incapable of serving the entire continental United States.

Finally, I would note that the cable industry has received tens of thousands of licenses from the FCC, including numerous licenses granted this very year, none of which were purchased in auction. Again, I am not faulting the cable industry, just noting a fact: It costs the cable industry less to do business with the Federal Government than it would cost us. Yet we are expected to be a price competitor with cable

In closing, I think it may be useful to contrast our regulatory efforts to those of the Wi-Fi industry. Here is a technology that burst onto the scene in just the last couple of years, and it is by all accounts flourishing. Recent reports estimate that by 2007, Wi-Fi in the U.S. and Europe will generate revenue of \$5.5 billion. Policy-makers often cite Wi-Fi's success as evidence of what happens when government regulation is no barrier to entry or innovation. Wi-Fi users do not pay the government for the spectrum they use, nor do they face regulatory delays.

Terrestrial MVDDS should play on a level playing field with satellite competitors

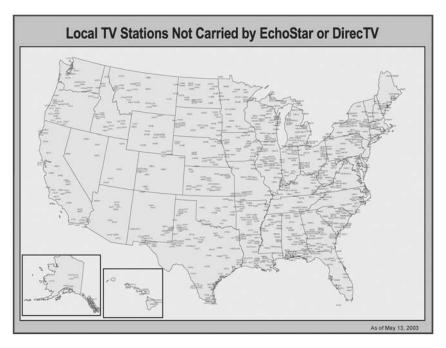
Terrestrial MVDDS should play on a level playing field with satellite competitors who utilize the very same spectrum. S. 564 achieves that goal while at the same time ensuring that all consumers, rural and urban, will have access to local television stations, emergency information, public interest programming, and broadband service.

If we're privileged to be licensed, I can assure you that we will deploy MVDDS across the entire United States, including Alaska and Hawaii, within two years. Moreover, our service will be affordable.

We are not opposed to the licensing of other MVDDS operators who can share the spectrum with us. Any company that can demonstrate its own technology through independent testing, pursuant to the LOCAL TV Act and S. 564, should be eligible for an MVDDS license.

S. 564 will ensure that all terrestrial and satellite operators will be licensed in a like manner. Implementation of this principle will jumpstart the successful deployment of MVDDS, enabling consumers—urban, suburban *and* rural—to receive the benefits of an innovative new service and lower prices!

Thank you again for allowing me to testify. I would be pleased to answer any questions you might have.



Senator Burns. Thank you.

We have been joined by Senator Stevens of Alaska and we have just taken the first testimony from the first witness, Senator Stevens. Have you got an opening statement and then we will continue on?

STATEMENT OF HON. TED STEVENS, U.S. SENATOR FROM ALASKA

Senator STEVENS. Thank you, Mr. Chairman. I have a statement. I cannot stay because of other commitments, but I am pleased to see this bill here today.

I do not know if anyone else has reminded the Committee of the history. I know that Northpoint has sought a license from the FCC since 1994. In 1999, at my request, there was a provision in the Rural Local Broadcasting Signal Act to require the FCC to act on Northpoint's license application by November 29, 2000. As the time came for that deadline to be fulfilled, to arrive at that deadline, I met with the FCC chairman at that time, Mr. Kennard. He told me he would act on the licenses as required. Instead, he started a new proceeding to determine whether there should be an auction.

Later we worked on legislation that required there be a test to determine if Northpoint would cause interference with existing satellite companies. It was determined that there would be no interference, but still there would be an auction.

I understand you have before you a bill, Mr. Chairman, to do what we thought we were going to do in 1999 and I encourage you to get the bill out of committee as soon as possible.

Thank you very much.

Senator Burns. OK, Senator Stevens. Next is Andrew Wright, President, Satellite Broadcasting and Communications Association of America. Thank you for coming, Mr. Wright.

STATEMENT OF ANDREW S. WRIGHT, PRESIDENT, SATELLITE BROADCASTING AND COMMUNICATIONS ASSOCIATION OF AMERICA

Mr. WRIGHT. Thank you, Mr. Chairman. Thank you, Senator Burns and Senator Stevens, for inviting me to testify today. SBCA is the national trade association that represents the satellite services industry. Our members include satellite television, radio, and broadband providers, programmers, equipment manufacturers, distributors, and retailers.

Satellite television has its roots in rural America. We are extremely proud that we are the only multi-channel video provider that provides choice and competition to all Americans. Direct broadcast satellite operators DIRECTV and EchoStar provide the most advanced television choices in the multi-channel video market, including high definition television, interactive, and other advanced services, to all Americans without discriminating between rural and urban areas.

When Congress passed the Satellite Home Viewer Improvement Act of 1999, DBS hoped to be able to rebroadcast local channels to consumers in 20 markets. With considerable investment in technological improvements, today DBS subscribers in over 70 markets can receive local channels covering over 75 percent of U.S. television households, and both providers are working hard to expand that number. By the end of this year, each DBS operator will bring local service to over 100 markets, reaching over 85 percent of Americans

In addition, satellite providers have invested hundreds of millions of dollars to be the only provider offering one- and two-way high-speed Internet service to virtually every home and business nationwide. Today subscribers of the two providers of satellite broadband, DirectWay and StarBand, expense data rates that are up to 10 times faster than dial-up Internet service, and new entrants Spaceway and WildBlue are preparing to launch the next generation of satellite broadband services. This next generation service will offer data rates comparable with cable modem and DSL service and at a competitive price.

However, Mr. Chairman, satellite operators cannot offer subscribers a competitive alternative to wireline technology if the satellite signals that currently provide service to consumers are subjected to interference. Specifically, the ability of DBS to offer its 20 million households, over 53 million individual viewers, competitive alternatives would be greatly diminished if satellite signals are subjected to interference from a television wireless cable service operating in the spectrum that was allocated to DBS.

Sharing would cause ruinous interference to millions of our current and future customers. As Members of Congress, you should be concerned by proposals that would jeopardize the benefits of increased competition that your constituents now enjoy.

In an effort to protect current and future DBS subscribers, SBCA and the DBS providers have appealed a recent decision by the FCC

to the Federal Circuit Court in hopes of reversing the Commission's spectrum-sharing decision. We expect our appeal will be heard this fall. However, our greatest concern in this matter is protecting DBS consumers from harmful interference.

However, we feel strongly that, should the FCC's spectrum-sharing decision ultimately be upheld, Northpoint should not be granted its request for a free nationwide exclusive license. Northpoint is asking Congress to require the commission to bypass the normal statutorily mandated auction process and to prefer Northpoint to its wireless, broadband, and DBS competitors with a gift of publicly owned spectrum. There is no legal or public policy justification to prefer Northpoint to its competitors. Indeed, the Bush administration has issued a statement of administration policy opposing the Northpoint spectrum grab.

This bill would not level the playing field. Other wireless cable systems functionally identical to the one proposed by Northpoint have invested over \$1.6 billion at auction for their licenses. The DBS industry has also purchased spectrum licenses at auction and in the aftermarket, spending over \$734 million, and another DBS auction is scheduled for August. Moreover, DBS service providers have invested over \$7 billion to bring DBS service to all Americans.

In closing, DBS is offering consumers across America, including rural and underserved areas, a competitive option for television, including high definition video and other advanced services. The next generation of high-speed Internet via satellite is just around the corner. The future looks bright. To threaten the technical integrity and picture quality of this proven service with guaranteed interference would harm all consumers.

We look forward to working with you and your staff as you continue to create communications policy that benefits all Americans, particularly those in rural areas who otherwise have few options for the services that DBS offers. Thank you.

[The prepared statement of Mr. Wright follows:]

PREPARED STATEMENT OF ANDREW S. WRIGHT, PRESIDENT, SATELLITE BROADCASTING AND COMMUNICATIONS ASSOCIATION

Thank you, Mr. Chairman, Senator Hollings, and members of the Subcommittee, for inviting me to testify today. My name is Andy Wright, and I am the President of the Satellite Broadcasting and Communications Association. SBCA is the national trade association that represents the satellite services industry. Our members include satellite television, radio and broadband providers, programmers, equipment manufacturers, distributors and retailers.

manufacturers, distributors and retailers.

The direct broadcast satellite (or DBS) operators SBCA represents provide the most advanced television choices in the multichannel video market, including high-definition television and other advanced services. The benefit of satellite-delivered technology like DBS is that it can reach consumers across the country without discriminating between rural and urban, sparsely or densely populated areas.

When Congress passed the Satellite Home Viewer Improvement Act in 1999, granting DBS providers the ability to offer local channels, DBS operators DIRECTV and EchoStar hoped to be able to offer local channels to consumers in 20 markets. However, with technological improvements and increased broadcast center capabilities, today, DBS subscribers in over 70 markets can receive local channels, covering over 75 percent of U.S. television households. Further, both providers are working hard to expand the number of markets they can serve with local-into-local. By the end of this year, each DBS operator has said that they will bring local service to 100 markets or more. Recent consumer research shows that more than 85 percent of new DBS subscribers are purchasing packages that include their local channels if they are located in a market where local-into-local is available.

In addition to providing satellite television service to 20 million American households, satellite providers also offer one-and two-way high-speed Internet service to homes and businesses nationwide. Today, subscribers of the two providers of satellite broadband, DIRECWAY and StarBand, experience data rates that are up to

ten times as fast as dial-up Internet service.

New entrants SPACEWAY and WildBlue are preparing to launch the next generation of satellite broadband service. This next-generation service should be especially appealing to the millions of homes and small offices that lack access to wireline broadband alternatives. The data rates for these new services will be comparable to cable modem or digital subscriber line (DSL) service. A "digital divide" will no longer exist in the market for high-speed Internet service because satellites reach across the country with a national footprint. Via satellite, millions of rural consumers that may never be served by wireline technology will have the opportunity to access the Internet at the fast data rates available to urban and suburban customers from cable and DSL.

However, satellite operators can not offer subscribers a competitive alternative to wireline technology if the satellite signals that currently provide service to consumers, businesses and the government are subjected to noise from other services that operate in or adjacent to the spectrum bands where DBS, satellite radio, and satellite broadband operate. Specifically, the ability of DBS to offer subscribers a competitive alternative to wireline technology would be greatly diminished if the satellite signals which carry DBS services to the American public are subjected to interference from a terrestrial wireless service operating in the spectrum that was

allocated for DBS's primary use.

There are now over 20 million DBS subscriber households—comprising some 53 million individual viewers—which means that one in five television households across America receive their multichannel video service via satellite. The issue of permitting a terrestrial wireless cable service—as Northpoint Technology, Inc. and others propose—to operate in the spectrum band set aside for DBS is of concern to the DBS industry because of the threat of ruinous interference that would be caused to our current and future customers.

As Members of Congress, you should be extremely concerned by any proposal that would jeopardize the benefits of increased competition that your constituents now enjoy. Competitive rates, better customer service, and the quick deployment of advanced telecommunications offerings are the result of the tireless efforts of Congress and the Federal Communications Commission (FCC) to create public policy that spurs competition in the multichannel video program distribution (MVPD) market.

Last May, the FCC released an Order authorizing the terrestrial use of the DBS spectrum. Unfortunately, it allows for this new service, called Multichannel Video Distribution and Data Service (MVDDS), to increase a DBS customer's signal unavailability by 30 percent or more. As FCC Commissioner Kevin Martin questioned, in his dissent to the Order, "does in the range of 30 percent or higher' mean 60—

on his dissent to the Order, "does in the range of 30 percent or higher mean 60–90 percent? . . . Unfortunately, these questions seem to lead to only one conclusion: the majority's technical requirements are driven by a desire for MVDDS deployment, regardless of cost to DBS licensees and their customers."

Commissioner Martin also shares our concern of protecting current and future DBS consumers from harmful interference. He states, "By law, DBS service is entitled to protection from harmful interference.' Even more important, existing DBS sustances described from unreasemble interference. This forder does customers deserve to be protected from unreasonable interference. This [Order] does

neither.

It is important to note that the increased interference that will result from Northpoint's proposed service operating in the DBS band is in addition to the 10 percent increase in unavailability that the DBS industry was forced to accept from another satellite service (Non-geostationary satellite orbit, fixed satellite service, or NGSO-FSS). A third ubiquitous consumer service should not be shoehorned into this spectrum band at the cost of harming the competition in the multichannel video marketplace that Congress and the Commission have worked for over a decade to

In an effort to protect current and future DBS subscribers, SBCA and the DBS providers have asked the U.S. Court of Appeals for the District of Columbia Circuit to reverse the Commission's spectrum-sharing decision. We expect our appeal to be heard this fall.

We do not fear further competition. In fact, the DBS providers, DIRECTV and EchoStar, asked the FCC to place Northpoint's proposed service in an adjacent spectrum band, which has the same propagation characteristics and the same amount of spectrum available, but is not used to provide a ubiquitous consumer service to 20 million households and more than 53 million Americans. We do, however, fear the devastating interference that will occur if this contamination of the DBS downlink by terrestrial services is ultimately permitted. Indeed, our fears have been confirmed by a Congressionally-mandated independent study, performed by the MITRE Corporation. Specifically, the very first finding of the MITRE Report is that the terrestrial sharing of the 12.2–12.7 GHz spectrum band, "poses a significant interference threat to DBS operation in many realistic operational situations."

While our greatest concern with this matter is protecting DBS customers from harmful interference, we feel strongly that should the FCC's spectrum-sharing decision ultimately be upheld, Northpoint should not be granted its request for a free, nationwide exclusive license. Northpoint filed suit in Federal court as well, opposing the Commission's decision to assign MVDDS licenses via competitive bidding. Northpoint has also appealed to Congress to require the Commission to bypass the normal statutorily-mandated auction process and prefer Northpoint to its wireless cable and DBS competitors with a gift of publicly-owned spectrum. There is no legal or public policy justification to grant that request. Indeed, the Bush Administration opposes Northpoint's spectrum grab and has issued a Statement of Administration Policy, stating, "The Administration would strongly oppose any amendment that would restrict the FCC's ability to assign, via competitive bidding, spectrum licenses that could be used by terrestrial (i.e., non-satellite) services. Such a provision would interfere with the efficient allocation of Federal spectrum licenses, provide a windfall to certain users, and reduce Federal revenues."

fall to certain users, and reduce Federal revenues."

Further, there are other service operators that have expressed a desire to provide MVDDS in the 12.2–12.7 GHz band. In filings to the FCC, both MDS America and Pegasus Broadband Corporation have opposed Northpoint's spectrum grab, and urged the Commission to allow for more than one competitor in the MVDDS market. Even though we remain opposed to any terrestrial users operating in the DBS spectrum band due to the resulting interference to which our subscribers would be subjected, it would be anti-competitive to grant an exclusive nationwide license to one

MVDDS operator for free.

The FCC rejected Northpoint's requests for a free, nationwide exclusive license, and ruled that MVDDS licenses will be assigned via its normal competitive bidding procedures. In May 2002, the FCC correctly ruled on this issue by stating, "Assigning MVDDS licenses through competitive bidding also promotes efficient and intensive use of the spectrum and recovery for the public of a portion of the value of this scarce resource." The auction for MVDDS licenses was recently postponed, but only until the Commission resolves the question of which geographic divisions to use to

assign MVDDS licenses.

In arguing that the Commission should grant it free terrestrial use of the DBS spectrum, Northpoint continues its effort to misrepresent the plain meaning of the Open-market Reorganization for the Betterment of International Telecommunications Act ("ORBIT Act"). The ORBIT Act states that, "the Commission should not have the authority to assign by competitive bidding orbital locations or spectrum used for the provision of international or global satellite communications services." The ORBIT Act does not exempt domestic satellite services, such as DBS, from the normal auction process. In fact, the FCC has scheduled an auction for this August to assign the remaining DBS frequencies. The ORBIT Act most certainly does not exempt a non-satellite provided domestic point-to-multipoint terrestrial wireless cable service, as Northpoint proposes to provide, from participating in the normal competitive bidding procedure.

Other wireless cable systems, functionally-identical to the one proposed by Northpoint, have invested over \$1.6 billion at auction for their licenses, and the DBS industry has paid \$734 million to purchase spectrum at auction and in the aftermarket. Moreover, DBS service providers have invested over \$7 billion to bring DBS service to over 53 million viewers across America. This investment includes the acquisition of spectrum, as well as money spent to build, insure, launch and operate DBS satellites, ground systems, uplink facilities and call centers. DBS operators made their investments in reasonable reliance upon the Commission's Orders that facilitated an interference-free environment in which to operate their systems.

In closing, DBS is currently offering consumers across America, including rural and underserved areas, a competitive option for video television, including high-definition video and other advanced services. The future looks bright. To threaten the technical integrity and picture quality of this proven service with guaranteed interference would harm rural consumers. We look forward to working with you and your staff as you continue to create communications policy that benefits all Americans, particularly those in rural areas who otherwise have few options for the services DBS offers.

Thank you.

Senator BURNS. Thank you.

Now we have Mr. Harold Kirkpatrick, President and CEO of MDS America. Thank you for coming today.

STATEMENT OF HAROLD KIRKPATRICK, PRESIDENT AND CHIEF EXECUTIVE OFFICER, MDS AMERICA, INC.

Mr. KIRKPATRICK. Thank you, Senator. Chairman Burns, Senator Sununu, good afternoon and thank you very much for this opportunity to testify on behalf of MDS America. My name is Harold Kirkpatrick and I am the President, Chief Executive Officer, and the founder of MDS America, and I wish to personally thank you and your outstanding staff for inviting MDS America to be a witness at this very important hearing. We hope you will benefit from our point of view.

I have submitted more detailed written testimony to the Committee for its consideration. In my allotted time, I would like to briefly introduce you to MDS America and explain why we support allowing the FCC to swiftly proceed with auctions for the MVDDS

spectrum.

We do not support this proposed legislation and we believe it is not the best means of delivering broadband services throughout the United States, particularly to rural and underserved areas. In fact, Chairman Burns, I am from the backwoods of north Georgia and I understand rural areas as well as anybody.

Senator BURNS. That is above the gnat line, though.

[Laughter.]

Mr. Kirkpatrick. Who we are. MDS America is a startup company based in Stuart, Florida, and founded in the year 2000. We are the exclusive North American licensee of MDS International, the leading designer of terrestrial broadband transmission systems in the DBS band. I formed MDS America in 2000 after working in the information technology industry for 15 years and working with MDS International deploying these systems for 5 years.

What we do. Since 1994, MDS International has actually deployed terrestrial broadband systems like the ones described in S. 564 in numerous locations overseas, providing video programming and high-speed Internet services to many delighted subscribers. I have helped design and install some of these systems and seen them work in some of the most challenging environments known to man, including that of Greenland, arguably the most rural area in the world.

This technology works, customers love it, and we are ready to deploy these systems in the U.S. today. MDS systems have delivered Internet data wirelessly to individual computers at speeds exceeding 12 megabits per second, faster than any cable modem or DSL.

As the exclusive U.S. licensee of this technology, MDS has the legal right, the technical ability, and the financial backing to bring wireless broadband services to market in the U.S. just as fast as the FCC can issue these licenses. In fact, MDS International has just deployed the largest system of this type in the world, with a channel capacity of over 500 digital channels, in the United Arab Emirates.

Why we oppose this legislation. If S. 564 were to become law, MDS America and other hopeful MVDDS providers could be de-

layed or denied the opportunity to provide wireless broadband service in the U.S. because the radio spectrum at issue in this bill would be given away for free to one company or to an arbitrarily

limited number of potential operators.

To my knowledge, Northpoint Technology has never built or deployed a commercial broadband system anywhere in the world. But even if that were not the case, the winners under this legislation would be chosen only after further contentious regulatory scrutiny and inevitably the losers in this skirmish would seek relief in the courts, resulting in even further delays in deploying these critical

Why we support the FCC's licensure plan. As you may know, the MVDDS radio channels were scheduled to be auctioned by the FCC commencing on June 25, 2003, but that auction was postponed due to the FCC's consideration of two changes to its licensing rules. We understand that the FCC intends to reschedule these auctions for later this summer and we are ready to participate in them, as are

other companies who have come to us seeking technology

These auctions will create a financial incentive to build out this spectrum. Gifts of spectrum, however, do not provide this incentive. To paraphrase Winston Churchill, spectrum auctions may be the worst form of radio licensing known to man, except for all the others. As Dr. Hazlett and others have observed, if there is truly a level regulatory playing field with transparent auction rules and reasonable construction obligations, this radio spectrum will go to those parties who are prepared to make a financial commitment to delivering wireless broadband services throughout the U.S. This is surely our hope and aspiration.

In closing, we at MDS America urge you to support the FCC's decision to auction this valuable spectrum under the FCC's normal

spectrum auction procedures as soon as possible.

I would like to thank you once again for the opportunity to testify here today in this hearing on behalf of MDS America. If there are any questions from the Committee, I would be delighted to answer them to the best of my abilities.

[The prepared statement of Mr. Kirkpatrick follows:]

PREPARED STATEMENT OF HAROLD KIRKPATRICK, PRESIDENT AND CHIEF EXECUTIVE OFFICER, MDS AMERICA, INC.

Chairman Burns, Senator Hollings, and distinguished Members of the Sub-committee: Good afternoon and thank you for this opportunity to testify on behalf of MDS America.

My name is Kirk Kirkpatrick and I am the President and Chief Executive Officer of MDS America. I wish to personally thank you both, as well as your outstanding staff, for your collective willingness to include MDS America as a witness at this very important hearing. We hope you will benefit from our point of view in this pro-

ceeding.
We at MDS America fully support the FCC's plan to auction the Multi-channel Video Data and Distribution Service ("MVDDS") spectrum that is the subject of this hearing today. We believe that going forward with an auction will fulfill the public policy objectives that Congress meant to accomplish when adopting auctions as the FCC's primary spectrum licensing mechanism: an auction of the MVDDS spectrum will ensure that this spectrum is promptly licensed to the parties who value it most highly, with the added benefit of bringing millions of dollars into the U.S. Treasury. More importantly, competition among MVDDS providers will result from an auction; that competition will ensure that facilities will be built expeditiously and services will be made available to the public as quickly as possible. This competition will especially benefit rural America—MVDDS spectrum is particularly well suited to providing broadband services in rural areas that are not served or underserved by

cable, local telephone, and broadband Internet access service providers.

MDS America hopes to be one of those competitors in the MVDDS market. We are based in Stuart, Florida, and we are the North American licensee of MDS International, the leading designer of terrestrial broadband transmission equipment in the Direct Broadcast Satellite ("DBS") band. MDS International has deployed terrestrial broadband systems in numerous locations overseas, providing video programming and high-speed Internet services to many delighted subscribers. Some of these systems share frequencies on an interference-free basis with DBS-DTH satellite

services in their areas.

MDS America hopes to introduce this innovative terrestrial broadband technology into the U.S. market. As I noted previously, we strongly support the FCC's May 2002 decision to auction the MVDDS spectrum for terrestrial use. By establishing

2002 decision to auction the MVDDS spectrum for terrestrial use. By establishing a level playing field, the FCC will encourage the most efficient and rapid introduction of the MVDDS spectrum-sharing technology throughout the United States. If S. 564 were to pass, however, MDS America and other hopeful-MVDDS providers could be delayed or denied the opportunity to compete, because the MVDDS spectrum at issue in this hearing today could be given away, for free, to one company, Northpoint Technology, or to an arbitrarily limited number of potential operators. This one company, Northpoint Technology, curiously has never built or deployed a broadband system anywhere in the world. The only "systems" ever built by Northpoint, to our knowledge, involve one or perhaps two transmitters with limited bandwidth. MDS America seriously questions whether Northpoint even has the ability to deploy a commercially viable broadband system of any type. In any event, ability to deploy a commercially viable broadband system of any type. In any event, should S. 564 become law the selection of MVDDS spectrum "winners" pursuant to this legislation will be subject to further regulatory scrutiny and delays, and, inevitably the losers in that FCC proceeding will seek legal relief in the courts, resulting in even further delays in deploying these critical services.

Northpoint has been seeking legislative relief for years to circumvent the FCC's normal spectrum licensing procedures, which, of course, were put in place by Congress. In January 1999, Northpoint submitted to the FCC applications and waiver requests for terrestrial use of the 12 GHz band, arguing that the FCC should waive its rules and grant it an uncontested license to operate terrestrially on the DBS spectrum. Northpoint claimed that it was the only company in existence with a non-interfering terrestrial technology in the 12.2 to 12.7 GHz band. It also argued to the FCC that its "unique" technology justified its demand that the FCC waive its established procedures and grant its license applications without consideration of other

potential applicants.

We beg to differ, and so did the FCC. The FCC denied Northpoint's request and scheduled the 12.2 to 12.7 GHz spectrum for auction, noting "several parties have indicated that they have the ability to reuse spectrum in the 12.2 to 12.7 GHz band and seek the opportunity to do so as well." As you know, the MVDDS radio channels were scheduled to be auctioned by the FCC commencing on June 25, 2003, but the auction was recently postponed due to the FCC's consideration of changes to its

MVDDS licensing rules.

Despite the FCC's denial of Northpoint's waiver request, Northpoint continues to urge passage of S. 564 which, if adopted, would prevent the spectrum from being auctioned, literally give the spectrum away, for free, and result in the loss of millions of dollars to the U.S. Treasury. Moreover, passage of S. 564 could mean no competition in the MVDDS market, and the denial or further delay of broadband services precisely where such services are needed the most: rural and underserved

areas

MDS America asks you to oppose Northpoint's unprecedented spectrum grab through supporting the FCC's decision to auction this very valuable spectrum under the FCC's normal licensing procedures. We are not asking for special treatment: MDS America simply wants the opportunity to bid on the MVDDS spectrum in an FCC auction.

MDS America asks you to consider the following with respect to Northpoint's efforts seeking passage of S. 564:

Point 1: Northpoint's argument for special treatment is based on the inaccurate premise that it alone has technology capable of interference-free use of the 12.2 to 12.7 GHz band.

Through a technology license granted by MDS International, MDS America holds the exclusive U.S. rights to MDS International's innovative technology, including terrestrial broadband wireless technology capable of transmitting video and very high-speed Internet data at 12.2 to 12.7 GHz, without causing interference to satellite services sharing the same frequency band. In addition, MDS International has granted MDS America ownership of any present or future patents it may hold or apply for. MDS International's systems have achieved a remarkably robust data delivery speed of 12 MBPS to the individual consumer.

MDS International has been developing its terrestrial broadband wireless systems since 1986, which it operates successfully in other parts of the world. MDS International sold its first terrestrial broadband wireless system to the U.S. government in 1996 to provide video services to U.S. armed forces stationed in Oman. In fact, to the best of our knowledge, MDS International is the only company in the world today with operational terrestrial systems of this type. Many of these systems use the same KU-band frequencies as satellites serving the same localities without any significant interference.

A recent tender in the United Arab Emirates for the largest MVDDS system ever built was won by MDS International over six other companies. MDS International subsequently built the first phase of this system beaming 154 digital TV channels to the entire area of Al-Ain in the UAE. The signal has been reliably received at a distance over 70 kilometers from the transmission site at Jabel Hafite. This system has a total channel capacity of 500 digital channels spanning 700 MHz of radio bandwidth (by comparison, the FCC's MVDDS rules will allow 500 MHz of bandwidth for each licensed system). This means that the MDS International system is larger than any system that could be built in the U.S. under present FCC licensure rules and is the largest system of its type in the world. The UAE company, Etisalat, that owns this system is owned by the government of the UAE who would field complaints of DBS interference by Emirati citizens had there been any. At this writing, this MVDDS system has been operational for over seven months without a single interference complaint. In addition, Etisalat has ordered three additional systems of the same size for the emirates of Dubai, Sharjah, and the City of Abu-Dhabi from MDS International. They have announced intentions for ordering eight more in the near future.

The Northpoint system, if it indeed exists, has never been commercially deployed anywhere in the world. In the above-mentioned tender, Northpoint was not even qualified to bid.

Point 2: Northpoint's legal claims were rejected by the FCC.

After a lengthy rulemaking proceeding at the FCC during which a wide variety of views and concerns were expressed, the FCC rejected Northpoint's request for an exclusive nationwide license for the terrestrial use of the DBS spectrum. Upon a close examination of all relevant statutes and citing Congressional intent, the FCC explicitly rejected Northpoint's legal claim that both the ORBIT Act and the LOCAL TV Act bar the use of competitive bidding procedures to assign licenses for MVDDS in the DBS band. The FCC's decision to license competitive MVDDS services, reached after years' worth of deliberation, reflects a "carefully crafted balance of technical and policy concerns."

 $Point\ 3:$ The MDS America Position: Pro-Competition, Pro-Consumer, Pro-Tax-payer.

Northpoint's anticompetitive effort to get MVDDS licenses without an auction, through the adoption of S. 564, should be rejected. Instead, the spectrum auction should proceed as planned. In this way, potential MVDDS providers will have the opportunity to compete to offer the best products, technologies, and services at the best prices. This is pro-consumer, pro-taxpayer, and consistent with the goals of the Communications Act. The FCC's rules are "technologically neutral," which is how it should be. The carriers with the best technologies will compete to offer the best services.

Point 4: The MDS America system has been successfully tested.

In May 2001, the FCC granted MDS America an experimental license to demonstrate that its MVDDS technology, already successful in other parts of the world, would not cause harmful interference with DBS transmissions in the U.S. Pursuant to this license, LCC International, an internationally recognized engineering and consulting firm working independently of MDS America, conducted a series of tests of the MDS system in 12 separate locations around Florida. In its written report, which has been submitted to the FCC and which has not been questioned by any interested party other than Northpoint, LCC concluded that the MDS system can be successfully deployed without causing harmful interference with DBS systems operating at the same frequencies. A copy of the LCC report is available on MDS America's website at

www.mdsamerica.com. Moreover, the FCC's rules have been carefully designed to guard against harmful interference to satellite systems.

Point 5: The MDS America System is economically viable in Rural America.

MDS America's MVDDS system, as deployed elsewhere, is particularly well suited for deployment in rural areas untouched by cable and served exclusively by DBS operators. MDS MVDDS cells, using technology like that used in the UAE, can reach the curve of the earth, allowing MDS America to deliver signal over thousands of square miles. With their extensive coverage capabilities, MDS America's cells are likely to reach enough of the population in rural areas of the U.S. to actually pay for the deployment of an MVDDS system. According to Northpoint's own press filings, the cell range of their system is only 100 square miles, not enough to make it an economically viable venture in the least populated areas of the U.S.

Conclusion

In closing, we at MDS America urge you to support the FCC's decision to auction this very valuable spectrum under the FCC's normal spectrum auction procedures. I would like to thank you again for the opportunity to testify here today in this hearing on behalf of MDS America.

Senator Burns. Thank you, Mr. Kirkpatrick. We appreciate that very much.

Now we have Mr. Thomas Hazlett, Senior Fellow, Manhattan Institute for Policy Research. Thank you for coming today.

STATEMENT OF THOMAS W. HAZLETT, SENIOR FELLOW, MANHATTAN INSTITUTE FOR POLICY RESEARCH

Mr. HAZLETT. Thanks for having me—

Senator BURNS. You want to pull that microphone over so that

we have got you on record here, the dulcet tones.

Mr. HAZLETT. —thank you, Senator. I am Thomas Hazlett and I am a senior fellow at the Manhattan Institute for Policy Research, as you note. I am also a former chief economist of the Federal Communications Commission and I have written extensively about spectrum allocation policies in the United States and around the world. I have also previously served as a consultant to Northpoint Technology and have submitted testimony to the Federal Communications Commission on their behalf.

The case of Northpoint Technology reveals ongoing infirmities in the U.S. spectrum allocation system. In a more efficient world, innovative wireless companies such as Northpoint would simply buy the spectrum they need, much as any company buys labor, raw materials, and capital inputs. Barriers to entry would be low and new competitors could quickly test their technologies with consumers in

the marketplace.

But, despite license auctions, the U.S. does not have anything approaching competitive bidding for spectrum. Firms attempting to offer novel wireless services must first convince the Federal Communications Commission planners that it would be in the public interest for spectrum to be allocated for their project. It is an understatement to say that this is a costly and time-consuming process. In it, the applicant must reveal its business plan, negotiate endless regulatory details with agency staff, negotiate spectrum-sharing rules with incumbent users, and do virtually all the heavy lifting in surmounting regulatory barricades designed, not to welcome rivals, but to foreclose them. License auctions, ironically, lift the walls.

Should a competitive technology, however improbably, get past the allocation contest, it must now buy back its business plan from the Federal Government. In this, it will compete with established service providers which have strong incentives to outbid the potential entrant simply to lessen the impact of new competition.

In Northpoint's case, I have estimated that either of the two incumbent satellite TV suppliers would bid several billion dollars above the highest bid that Northpoint might plausibly make for MVDDS licenses owing to the economic gain associated with avoiding price reductions. On an annual basis, cable and DBS subscribers would expect to pay at least \$2.75 billion less in subscription fees were Northpoint to enter the market. It should also be noted that these gains have been lost for several years already simply due to the delay imposed on Northpoint's entry by the FCC rulemaking process.

License auctions are very useful for assigning rights among roughly comparable applicants. The firm willing to pay the most to offer service is, all else equal, the firm that will likely do the best job of providing service to the public. But where applicants are distinguished, other assignment rules can be more efficient. Indeed, many, if not most, FCC licenses are still assigned by non-auction procedures because of the disruptive effect auctions have on telecommunications investment.

Specifically, the FCC does not invite competing bids for incumbents' license renewals. To do so would destroy incentives for licensees to invest in technology, capital, or a reputation for high quality service. All such investments could be substantially appropriated by others, including the Government, were a license to be put up for bids at expiration. Policymakers realize this and avoid economic losses by simply renewing licenses for law-abiding licensees.

But FCC regulators do not recognize that the same economic misallocation occurs when new entrants are appropriated after investing substantial resources in gaining spectrum allocation, the case of Northpoint Technology. The message this sends to innovators is clear: Give up early. If you seek to move the FCC to allocate spectrum to a new technology, you will invest years of hard labor, millions of dollars, for the right, if you succeed, to bid for a license against other interests who contributed not a kopek. Innovation grinds to a halt while entrepreneurs wait for someone else to shoulder spectrum allocation burdens.

Let me just read to you, by the way, the FCC's language. I should say this is two commissioners, the Chairman and Commissioner Kathleen Abernathy—in a recent rulemaking on MVDDS. This note says, "Northpoint arrived at the commission many years ago with a proposal for a new and innovative way to share the DBS spectrum. There is little question that had it not been for Northpoint the MVDDS service would not be ready to move forward today. Northpoint has put significant time and resources into developing its service model, as well as its commission and congressional advocacy over a long period of time. We applaud these efforts."

That is the end of the quote. My comment: the applause leads to congratulations and an invitation to join an auction to bid

against their rivals for the opportunity, the business opportunity they have created.

This tragedy of the commons leads to underinvestment, underinvestment in innovation, and consumers lose valuable new wireless options while paying higher prices for less competitive services.

The long-term solution is to reform spectrum allocation, allowing markets to efficiently shift bandwidth from less useful enterprises without government approval. In the near term, applicants who do invest substantial resources to bring about productive new uses of radio spectrum should not be appropriated, but rewarded. I think that the legislation being considered here is a step in that direction.

I have outlined—on my part, I have outlined a simple two-part test for regulators at the Federal Communications Commission to use. This is outlined in my paper "Anti-Competitive Uses of Competitive Bidding, the FCC's MVDDS Rulemaking," a very snappy title. I am happy to make this paper available today to any interested party or electronically. My address is <code>twhazlett@yahoo.com</code>.

Thank you very much.

[The prepared statement of Mr. Hazlett follows:]

PREPARED STATEMENT OF THOMAS W. HAZLETT, SENIOR FELLOW, MANHATTAN INSTITUTE FOR POLICY RESEARCH

My name is Thomas Hazlett, and I am Senior Fellow at the Manhattan Institute for Policy Research. I am a former Chief Economist of the Federal Communications Commission, and I have written extensively about spectrum allocation policies in the U.S. and around the world.

The case of Northpoint Technology reveals ongoing infirmities in the U.S. spectrum allocation system. In a more efficient world, innovative wireless companies such as Northpoint would simply buy the spectrum they need, much as any company buys labor, raw materials, and capital inputs. Barriers to entry would be low, and new competitors could quickly test their technologies with consumers in the marketplace.

But, despite license auctions, the U.S. does not have anything approaching competitive bidding for spectrum. Firms attempting to offer novel wireless services must first convince Federal Communications Commission planners that it would be in the public interest for spectrum to be allocated for their project.

It is an understatement to say that this is a costly and time consuming process. In it, the applicant must reveal its business plan, negotiate endless regulatory details with agency staff, negotiate spectrum sharing rules with incumbent users, and do virtually all of the heavy lifting in surmounting regulatory barricades designed not to welcome rivals but to foreclose them.

License auctions ironically lift the walls. Should a competitive technology, however improbably, get past the allocation contest, it must now buy back its business plan from the Federal government. In this it will compete with established service providers which have strong incentives to outbid the potential entrant simply to lessen the impact of new competition. In Northpoint's case, I have estimated that either of the two incumbent satellite TV suppliers would bid several billion dollars above the highest bid Northpoint might plausibly make for MVDDS licenses, owing to the economic gain associated with avoiding price reductions. On an annual basis, cable and DBS subscribers would expect to pay at least \$2.75 billion less in subscription fees. It should also be noted that these gains have been lost for several years simply due to the delay imposed on Northpoint's entry by the FCC rulemaking process.

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But where applicants are distinguished, other assignment rules can be more efficient. Indeed, many if not most FCC licenses are still assigned by non-auction procedures because of the disruptive effect auctions would have on telecommunications investment. Specifically, the FCC does not invite competing bids for incumbents' license renewals. To do so would destroy incentives for licensees to invest in tech-

nology, capital, or a reputation for high-quality service. All such investments could be substantially appropriated by others (including the government) were a license to be put up for bids at expiration. Policy makers realize this, and avoid economic

losses by simply renewing licenses for law-abiding licensees.

But FCC regulators do not recognize that the same economic misallocation occurs when new entrants are appropriated after investing substantial resources in gaining a spectrum allocation—the case of Northpoint Technology. The message it sends to innovators is: give up early. If you seek to move the FCC to allocate spectrum to a new technology you will invest years of hard labor, and millions of dollars, for the right (if you succeed!) to bid for a license against other interests who contributed not a kopek. Innovation grinds to a halt while entrepreneurs wait for some one else to shoulder spectrum allocation burdens.

This tragedy of the commons leads to under-investment, and consumers lose valuable new wireless options while paying higher prices for less competitive services. The long-term solution is to reform spectrum allocation, allowing markets to efficiently shift bandwidth from less useful enterprises without government approval. In the near-term, applicants who do invest substantial resources to bring about productive new uses of radio spectrum should not be appropriated but rewarded. I have outlined a simple two-part test in my paper, "Anticompetitive Uses of Competitive Bidding: The FCC's MVDDS Rulemaking," which would allow regulators to distinguish when license auctions are appropriate under the current spectrum allocation process. I am happy to make this paper available to any interested party today, or electronically. My address is: tuhazlett@yahoo.com.

Senator Burns. Now we have Mr. Larry Roadman, President, Marketville—Margaretville Telephone Company, Margaretville, New York.

STATEMENT OF LARRY S. ROADMAN, PRESIDENT, MARGARETVILLE TELEPHONE COMPANY, INC. AND MANAGER, WIRELESS ACCESS LLC

Mr. Roadman. Mr. Chairman, I am not familiar with the procedures and my testimony is going to diverge into—I could plead that it is going to bring us back down to earth in the 700 megahertz and LPTV spectrum. But I wonder if I could request that my testimony be submitted in full into the record and that I be available for questions on LPTV and 700 megahertz, but I am clearly going to digress from the rather interesting interchange that is going to occur.

Senator Burns. Without objection, your full statement will be made part of the record. Is there some way you want to—maybe

you can summarize it?

Mr. ROADMAN. In what I wanted to do—I represent an independent local exchange carrier, a small telephone company, a little cable company, a little ISP in upstate New York, which is not all that different from Montana or New Hampshire. But I wanted to make some points, and my testimony does, as far as, one, making clear—and I think everybody recognizes this, but sometimes it is good to clarify—that we are really not talking, when we are talking about underserved areas, we are really not talking about rural areas alone.

I happen to live 28 miles from New York City. New York City is wonderfully served by broadband. My customers at 150 miles from New York City have wonderful access to broadband, both DSL and cable modem. But I, 28 miles from New York in Westchester County, a rich suburb of New York City, commuting suburb, have been told, just do not bother asking for DSL. And I just got access to cable modem service about a month-and-a-half ago.

Senator Burns. Do you like it?

Mr. ROADMAN. Yes, sir. Senator Burns. Good.

Mr. Roadman. Again, there are some things in my testimony, requests for action by Congress in the 700 megahertz and in the unlicensed spectrum, that are fine in the record. I really do not want to digress from—I do want to thank you, though, chairman, for all of your efforts, both on the LPTV bill a couple years ago and in the ongoing efforts like the broadband investment, rural broadband investment expensing.

But I will digress from here and I do not want to do that. [The prepared statement of Mr. Roadman follows:]

PREPARED STATEMENT OF LARRY S. ROADMAN, PRESIDENT, MARGARETVILLE TELEPHONE CO. INC. MANAGER, WIRELESS ACCESS LLC

Good afternoon, Chairman Burns and members of the subcommittee. I am honored to testify before you today on an issue of extreme importance to rural Americans and the rural telecommunications carriers that serve them. Mr. Chairman, I want to recognize and commend your ongoing effort to promote the economic health of rural areas. Specifically I want to recognize the LPTV Digital Data Services Pilot Project legislation passed in 2000 and your current bill proposing the expensing of rural broadband capital investments.

My company, Margaretville Telephone Company, doing business as MTC, is an Independent Local Exchange Carrier (ILEC) serving the central Catskill region of upstate New York—an area that is indeed rural and economically challenged. MTC has been family owned and operated since 1916, though under an ESOP formed in 1985, the 17 non-family employees own 30 percent of the company. MTC serves over 4600 telephone access lines. In addition, MTC's cable subsidiary serves over 1700 subscriber units and our ISP, Catskill On Line (COL—a joint venture with a neighboring ILEC, Delhi Telephone Company) serves over 8300 Internet subscribers in four upstate New York counties.

Within its telephone service territory, MTC offers DSL to 95 percent of its telephone subscribers and cable modems to all cable subscribers. Outside of its service territory, MTC offers cable modem service where it has built cable facilities to serve villages near Margaretville and wireless high speed data connections in Oneonta, New York, a tertiary market city 45 miles from Margaretville. Since early 2001, we have deployed equipment in the unlicensed 2.4Ghz spectrum and are currently using 802.11 equipment to create a "hot zone" service, covering much of the City of Oneonta.

In anticipation of offering high speed services throughout the underserved central Catskill region, MTC has sought spectrum assets over the past eight years. Through FCC auctions, it has purchased whole or partnership interests in PCS, LMDS and 700Mhz licenses. In addition, it joined with several other companies to form Wireless Access, LLC, the owner of three low-power TV (LPTV) licenses designated as test stations under in the LPTV Services Pilot Project legislation of 2000. We are eager and ready to deploy LPTV and/or 700Mhz broadband services when equipment is readily and economically available.

* * * * * * *

Policymakers, service providers and subscribers all recognize there is, or soon will be, a very real need for broadband accessibility wherever you live and work, whether it is in rural Montana, suburban New York or downtown Washington, D.C. The extent and actual location of the underserved areas in this country may not be as well understood.

While my customers in Margaretville, 150 miles from New York City and in the northern reaches of the Appalachian poverty belt, have had access to DSL or cable modem broadband services, or both, for almost two years, I, living in Westchester County, just 28 miles from New York City and in one of the richest counties in the country, have only had access to cable modem service since early this year and have been told repeatedly not to expect DSL access any time soon. Interestingly, the latest survey by the National Telephone Cooperative Association shows that, by the end of this year (2003), 47 percent of its member companies plan to offer broadband services to all customers within twelve thousand feet of any fiber-fed nod in their systems. By that time only 5 percent of the companies intend to be offering only dial-up Internet service.

By making broadband services to their customers, one thousand plus independent telephone companies are acting as very effective "economic engines" in rural America. By offering these services in areas outside their traditional territories, by actually "reaching out" into tertiary and, even, secondary markets, most often using wireless technologies, these companies are complimenting the efforts of the larger providers who are primarily focused on the urban, primary markets.

* * * * * * *

Utilization of the LPTV and 700Mhz spectrum bands holds great promise for broadband delivery in secondary, tertiary and rural markets, and even in urban industrial areas not traditionally served by cable. These frequencies allow robust and non-line-of-site service provision, well-suited for use in sparsely populated plains or mountainous regions, as well as in built up large cities or suburban centers. Recognizing this promise ILECS were some of the first investors in early LPTV two-way data efforts (even before the supporting legislation) and ILECS makeup approximately 60 percent of the successful bidders in the initial 700Mhz auction in 2002.

In addition to expanding and accelerating broadband deployment, opening up the use of these spectrum bands offers Congress and the FCC three other opportunities. First, the establishment of licensed-band data services will enable the development of a stable, quality of service high speed data marketplace. Second, the addition of these two bands to the market will firmly establish a broad, competitive marketplace in high speed data. The active LPTV option and straight purchase market will determine what portion of the LPTV spectrum will be used for broadcast and what portion for two-way data. Third, unlike the expanding use of unlicensed spectrum, the expanding use of these two frequency bands will offer the opportunity of expanding government revenues through increased auction values and the growth of usage based fee revenues.

* * * * * * *

At least four actions by Congress and the FCC will significantly accelerate and enhance the development of a broad-based, healthily competitive broadband market-place.

- (1) Legislation: Legislation like Senator Burns' current bill proposing the expensing capital costs for broadband deployment will make business plans more achievable, aiding in the currently uphill battle for funding.
- (2) Focus on Licensed Spectrum: Furthering the deployment of licensed sustainable, higher quality, economically efficient broadband marketplace.
- (3) LPTV Spectrum Availability: The current economic situation has blocked efforts to raise funding necessary for progress on the Pilot Project, though an improving investment climate holds the promise of testing and development action in 2003. Robust development of the LPTV spectrum band will depend on a clear awareness that the FCC will expand two-way data usage past the initial 13 legislative test stations. I call on Congress to exact that commitment from the FCC.
- (4) Clearing of 700 Mhz Spectrum: A significant portion of one 700 Mhz license block was accutioned in 2002. The remainder of that block (along with one other block) will be auctioned in the next several months. Current license holders await the delivery of equipment from manufacturers. However manufacturers, as well as investors, are hesitant to move forward while broadcasters remain incumbent on many of the stations sold in the auction. The dates set for broadcasters to vacate these stations seem to be loosely administered and do not appear to be "dates certain". In order to assure the ability of license holders to use the 700 Mhz for broadband deployment, i.e., to move manufacturers and investors forward, I call on Congress to investigate what actions Congress and the FCC might take in either or both the broadcast and broadband markets to enhance and accelerate the viability of broadcasters vacating and licensees using the auctioned 700 Mhz and then to ensure that "dates certain" for vacating are both set and enforced.

Senator Burns. You do not want to start the fight too early here. I have a question for Mr. Hazlett, and thank you all for coming today and your statement, your full statement, will be made a part of the record and thank you.

How do you define the marketplace that MVDDS would enter? Should we look at competition between MVDDS companies or should we look at the competition among that technology of MVDDS along with cable and satellite and every other technology? How should we base our decision on making policy up here?

Mr. HAZLETT. Do you have an easier question? You are asking

me to define a market that does not exist yet?

Senator Burns. Yes, that is right.

Mr. HAZLETT. If it is defined as MVDDS, so that is rough. My approach has been to look at the multi-channel video market, MVPD, as defined by the Federal Communications Commission, and I think actually this has been the FCC approach. So I am sort of comfortable looking at it that way, even though broadband, of course, is part of that and that can constitute competition with other service providers.

Senator Burns. How much of the Wi-Fi industry's success can be attributed to the fact that its innovators are not subject to costs and delays of auctions? In other words, how have auctions affected their costs, and the difference between allocations and auctions?

Mr. HAZLETT. Well, the ready access, the fact that they are unlicensed, means there is no license holdup, and so it is everything that goes with licensing, including the auctions. That is in there on the one side. That helps Wi-Fi a lot.

What helps Wi-Fi maybe just as much or more is the fact that there are other problems everywhere else on the bandwidth licenses and with spectrum allocations. So Wi-Fi has been the one place where the action can take place. So on both sides of that, Wi-Fi has benefited.

Senator Burns. I would ask all of you the same questions and you can comment on it. Should we look at competition between different MVDDS companies or should we look at competition among that technology plus cable, satellite, and so forth? I would like to

hear all of you comment on that, please.
Mr. KIRKPATRICK. Chairman Burns, if I can comment on a couple things. First of all, Dr. Hazlett talked about the \$2 billion that the DBS industry could pay to keep people like me out of the market. That is ignoring the fact that 12.2 to 12.7 is not the only spectrum that a system like mine operates on. There is existing spectrum out there, 20 gigahertz, 40 gigahertz, 2.6 gigahertz, that we can and will build systems for that would exploit that as well.

To answer your question about the competition in the market, this is specifically what we are after. At MDS America and MDS International we consider ourselves to be the only company in the world building systems in this frequency right now. We do not have at this present time competition. So when Dr. Hazlett talks about a new and innovative technology, for us this is not new. We have been deploying it almost 10 years now, so it is not a new and inno-

vative technology for us.

Senator Burns. Mr. Wright?
Mr. Wright. Thanks, Mr. Chairman. I would say that the market is the multi-channel video marketplace. That is certainly what the FCC has been looking at and certainly how we look at it.

I would like to respond to something Mr. Hazlett said, which is that he was suggesting that Charlie Ergen, the President of EchoStar Communications, might bid billions of dollars too much for a license. I would have to suggest that he probably has not been

listening to testimony over the last few years. I cannot imagine

that happening.

I would like to emphasize again what Kirkpatrick has just said, which is we are not interested—the DBS industry does not want to stop Northpoint or MDS America or anyone else from entering this market. There is plenty of spectrum out there that a wireless cable system such as the one proposed by Northpoint could use. You would hear no objections from us if they were going to the LMDS or MMDS or the CARS band. We have gone out of our way to suggest spectrum that we think would be just as good or better for propagation purposes for their system.

We are just interested in them not interfering with us. We are also interested in them not being given a leg up against us, against DBS, against Mr. Kirkpatrick, against the other wireless cable providers. There is no public policy that we can see that would support

giving them a gift of the public spectrum.

Senator Burns. Ms. Bush?

Ms. Bush. First I would like to remind everybody that when Northpoint filed its application in January 1999, we were the only company to file an application seeking terrestrial use, and we were the only company for many years to participate in this proceeding before the FCC.

But the other point that I want to make is there were seven other companies who applied on the same day to use the exact same resource that Northpoint sought to use. People lose sight of that by trying to narrow this down to we are only going to look at MVDDS. The point is is that technology has advanced. With the move to digital, there are a lot more things we can do with spectrum than we used to be able to, and the idea that we are going to continue to put technologies in little niches and only look at them that way does not make sense.

The issue is getting service to consumers and service to consumers in a way that is fair from the Federal Government's standpoint to the applicants that are coming before the agency. So what we are talking about—people are saying we are trying to keep MDS out. That is not our intent. Our point is that we applied with seven other companies. The rules changed in the middle of the game. All we are saying is the rules should be the same for all applicants.

Under S. 564, MDS America can participate in independent testing and be licensed. It does not prohibit or limit who can be licensed and it does not mandate in fact that the FCC give out any licenses. The FCC could conclude that there is nobody qualified to be licensed under this bill. It is simply a matter that if a company spends a decade at the FCC seeking a license that they ought to be licensed the same way.

To your question, Senator Burns, of what the marketplace should be, I believe it should be the multi-channel video marketplace, which would include cable, it would include DBS, and it would include other Internet providers, that that is the market that we are looking to compete in, and on a going- forward basis all these entities should be licensed the same way.

Mr. WRIGHT. Mr. Chairman, may I respond to that? Senator Burns. You bet.

Mr. Wright. Mr. Chairman, I think it is important to point out Tony does not, Tony Cook Bush does not, point out the fact that the application that they filed those several years ago was rejected as having been improperly filed. They filed in a procedure that had to do with the licensure of satellite spectrum and so the FCC properly rejected that application and started a whole new proceeding on this MVDDS to utilize to see who could best utilize the terrestrial use of the 12.2 to 12.7.

Certainly MDS America has filed, Pegasus has filed. We suspect that if this goes to auction there will be several companies who will file. As Tony points out, technology has moved forward, and we suspect that there will be several companies that will file to use this spectrum. So although we think that the sharing should not be allowed, if it is going to be allowed then it certainly should not be granted to just one of the parties. Everybody who thinks they have a usage for the spectrum ought to have the opportunity to bid on it. Certainly I think my companies would be interested and I think that there are tons of other companies that would as well.

Senator Burns. Mr. Roadman? I want to finish this off. Mr. Roadman, do you want to comment on this?

Mr. ROADMAN. I just agree that it should look across the market at the multi-channel video.

Senator Burns. OK. Do you want to follow up?

Mr. KIRKPATRICK. Yes, Chairman Burns. I just wanted to say that obviously had the FCC opened a window for applying for terrestrial broadcasting in this spectrum, MDS would have filed an application as well. The window was open for non- geostationary satellite systems, which we do not build. We do not have anything to do with non-geostationary satellite systems and therefore we did not file an application in the non-geostationary satellite system window. It did not make any sense for us to do so.

That being said, if the interest, and I am sure the Committee's interest is, in rolling out this service quickly to rural areas, it would make sense that MDS America, representing MDS International, as the only company who has ever done it in this spectrum would be uniquely qualified to roll out the spectrum quicker than anybody, simply because all of the subsystems other than just the transmitter and the delivery of the radio signal we have in place. We have built these before, we are building them now.

Senator Burns. Senator Sununu.

Senator Sununu. Thank you, Mr. Chairman.

Ms. Bush. Excuse me, Senator. I just cannot resist, and I apologize for this. But in response to what SBCA said, that we filed our application at an inopportune time, the only point I would make was that it was clear the FCC was not going to give us an opportunity to file an application. They did not believe our technology worked, they did not believe that terrestrial and satellite systems could share at the time. Had we not filed in that proceeding, we would—none of us would be sitting here today.

Senator SUNUNU. Thank you.

Mr. Hazlett, you did not really imply that the managers of the DBS satellite servers, Mr. Ergen or anyone else, would overpay by \$2 billion for this spectrum if it was auctioned off, did you?

Mr. HAZLETT. Not even close, no.

Senator Sununu. Do you want to clarify the point that you were

making, because I think it is an important point.

Mr. Hazlett. Yes. Let us just take the official position of the United States Department of Justice in an interesting case, an antitrust adjudication in 1998. There you had a situation where PrimeStar, which then was the third satellite TV company, was going to buy some assets, some satellite assets, from NewsCorp-MCI. And the DOJ moved in to block that combination. They said that the deal here was that PrimeStar was owned by cable companies and they did not really have an interest in using those DBS assets to compete with the other satellite TV companies and cable companies; they just wanted to sort of stockpile these assets and have sort of a low-ball competition that maybe offered medium service out where they did not have cable systems. They said that PrimeStar actually had been engaged in that strategy since 1990 when it got going. So anyway, they blocked that.

Now the same exact logic is here, that the DBS providers would pay up to several billion dollars more. Now, of course Northpoint or some entrant would drop out way before that. I say this clearly in my paper. So they would never overpay, but they would pay enough to protect their profits, and that is why setting up an auc-

tion this way is inherently anticompetitive.

Senator Sununu. The point as I understand it is that where the resource is, the resource spectrum, is limited, the incumbent broadcaster would have an economic value to bid, quite significantly potentially, for the assets in order to keep them off the market and protect their competitive position?

Mr. HAZLETT. Right, and that bid is not associated with effi-

ciency, but with keeping prices higher.

Senator SUNUNU. I think that point was made to a certain extent in a similar way in the chairman's opening comments, that while auctions are in many cases efficient systems where the resources are limited, we are always going to have concerns that the public service—the public is being served and that the resource is being used in an economically efficient way.

Mr. Hazlett. Right.

Senator Sununu. Mr. Wright, how many channels are allocated to DBS in the United States?

Mr. WRIGHT. Senator, I am sorry; I do not know the answer to that question. I will have to get back to you. I will have to submit that for the record. I mean, we certainly carry hundreds of channels.

[The information referred to was not available at time of print.] Senator SUNUNU. Maybe, is there anybody else here that works in the satellite industry that might have the answer to that question?

Ms. Bush. I believe they allocate them by slots and each slot has 32 channels. And I believe there are approximately 200 channels amongst all the slots.

Senator SUNUNU. But how many, how many slots are there existing? In other words, how many slots of spectrum have been provided to DBS carriers over time? Ms. Bush. Well, there are a total of 256 slots. EchoStar has approximately 190 of those. DirecTV has about 46 of those. There is a company RLDBS which I believe has a few.

Senator Sununu. A couple of hundred, though, certainly?

Ms. Bush. Right.

Senator SUNUNU. Mr. Wright, how many of those have been allocated through a competitive bidding process?

Mr. WRIGHT. Mr. Chairman, all of the slots that have been allocated since Congress enacted the competitive bidding system have

been allocated by AFL—CIO, and there are additional slots——Senator Sununu. Well, but there are 200, 225 plus. How many of those went through the bidding, the competitive bidding process? Mr. Wright. Mr. Chairman, when the early slots were allocated

there was not a bidding process. So therefore those slots were not—

Senator SUNUNU. I understand that. I understand we are living in a modern age and time passes and things happen and you have auctions, you do not have auctions. But there are 226 slots out there that create the competitive environment for DBS. How many of them were auctioned?

Mr. WRIGHT. I do not know the answer to that, Mr. Chairman. Senator SUNUNU. Would you get me the answer to that for the record?

Mr. WRIGHT. I can get back to you on that, yes, sir.

[The information referred to was not available at time of print.] Senator SUNUNU. Please.

Mr. Hazlett, Ms. Bush?

Ms. Bush. There were two slots that were auctioned and, unfortunately, I do not know if they were full 32 channels each. All of the rest of the slots had not been auctioned——

Senator Sununu. Are you suggesting two out of the 225?

Ms. BUSH. No, I am suggesting something less than 60 out of the 225 channels were subject to an auction.

Mr. WRIGHT. Mr. Chairman, someone just handed me a note saying 64 have been auctioned thus far, and I believe 98 were allocated prior to that without auction. But again, I will confirm that and get back to you with an exact number.

Senator SUNUNU. I appreciate that. This is an important point because we are discussing a level playing field, one way or another how to ensure that we have both a level playing field and the efficiency of use that I talked about earlier.

Mr. Kirkpatrick, do you believe that those channels that were not auctioned off should be retaken by the Federal Government and auctioned?

Mr. Kirkpatrick. Senator Sununu, I do not believe that those channels should be taken back and re-auctioned. In fact, in pleading ignorance I think it is inappropriate for me to answer the question. I would like to comment on it this way. The DBS industry and MVDDS are not the only players in this market. The big player in this market is the cable industry and the DBS industry, far from spending \$2 billion to quash Northpoint and MDS America, has a much higher vested interest in competing with an established cable industry.

The one thing that we all need to keep in mind here, and you have to keep in mind that I am a technical person; I am not a lawyer, that the cable people have a pipe running into the house which has unlimited bandwidth. The satellite people do not. Neither do MVDDS providers. So even were the DBS providers to bid in this auction, it would be senseless for them to warehouse the spectrum since they could come to MDS America, for example, implement MDS America-type systems to vastly increase their available bandwidth to compete with cable in the markets where they are losing against cable in urban areas.

Senator Sununu. I appreciate that point, although no one suggested that they would warehouse the spectrum. The point that was made, and it is an important point, is that they have by virtue of their incumbency, have an economic value that they can place on that spectrum that is much higher than non-incumbent carriers, regardless of what they choose to do with it. There is a price at which it would be of economic value for them to warehouse it.

But you are right, they probably would not do that. But regardless of whether they resell it, whether they use it themselves, or whether they warehouse it, the economic point Mr. Hazlett is making is that they have a greater economic value for that spectrum than other non-incumbent carriers.

Mr. Hazlett is gesturing. Please, if you want to add a comment. Mr. HAZLETT. Yes, I just wanted to emphasize that. The argument is not that they would warehouse it, but quite the reverse. They would use it. It would be deployed. They just would not lower

their prices. So it would keep prices higher and consumers would

suffer because of the lack of competition.

Mr. WRIGHT. Well, Mr. Chairman, Mr. Sununu, if I can respond to that. Obviously the incumbent here, the real incumbent here, is cable, and they are the ones who have practically a monopoly position. They have had a monopoly position in the market, and only now are we beginning to see some signs of competition as DBS, which has worked for 9 years now to get to 20 percent of the market.

The issue here is not is DBS some sort of powerful incum-

Senator Sununu. No, no. That is a very good point. But all you are suggesting is that there are other incumbent broadcasters like cable that might also have an interest in bidding, bidding at a very high level for the spectrum, again that they have a higher economic value than other non-incumbents. Whether a DBS incumbent or a cable incumbent, you may still have the same economic incentive.

Let me run through my questions and obviously you will have a

chance to comment further.

License fees. Ms. Bush, would you object to a system where the Government would charge a fee, a license fee, to everyone pro-

viding multi-channel service in the 12.2 to 12.7 range?

Ms. Bush. Well, I think the key issue is to everyone providing service in spectrum, because I think this then falls into the trap we keep falling into, which is, of being too narrow, because for example in this proceeding you have seven non-geostationary satellite applicants, who are also going to be sharing the spectrum. While they are not going to be providing multi-channel video, they are

going to be providing Internet service, so they are going to be a competitor in part of the market with us.

So I think the issue from Northpoint's standpoint is regulatory fairness across the board, that we have got to treat all of the applicants using spectrum the same way.

Senator Sununu. Mr. Wright, do you support that?

Mr. WRIGHT. Yes, thank you, Mr. Sununu. It is only in circumstances where there are multiple competitors wishing to use the same spectrum where an auction situation applies, and NGSOFSS was excluded by Congress. In other words, the FCC could not have chosen to auction that spectrum off because of the—

Senator Sununu. I am sorry, I am not talking about an auction, though. I am talking about annual fees for the use of the spectrum.

Mr. Wright. Well, of course annual fees are already charged for the use of the spectrum.

Senator Sununu. I stand corrected.

Ms. Bush, I think Mr. Wright used the term ruinous interference. Under what circumstances would your proposed system cause ruinous interference to those that are enjoying their DirecTV or other satellite services at home?

Ms. Bush. Under no circumstances. We have tested our system now four times. Actually we tested it three times. The FCC tested it once through the MITRE Company and the DBS industry got a license for experimental testing of our system as well.

The point I would make is that we operate our system, the DBS industry had the opportunity to operate our system without our involvement or approval, and under no circumstance was there any interference to any existing DBS customers. Northpoint tested in Washington, D.C., on the USA Today Building for 2 months non-stop, including through Hurricane Floyd. The DBS industry, DirecTV and EchoStar, conducted testing in Washington, D.C., as well in an effort to prove this ruinous interference which they claimed would happen, and they were not able to provide to the FCC evidence of one DBS customer that received interference.

So our point is that the DBS industry could not prove through their testing that there was interference and that ultimately was the FCC's conclusion, that throughout all this testing there was no interference.

Mr. WRIGHT. Mr. Chairman.

Senator SUNUNU. Do you agree with all of that?

Mr. Wright. Obviously this is an area where we have serious disagreement.

Senator SUNUNU. I appreciate that, but try to be clear in at least describing where the important areas of disagreement are.

Mr. WRIGHT. Yes, thank you. Our position is that it will cause serious interference, and that is what the MITRE test, the only independent test, the MITRE test, showed, that it would cause serious interference to DBS.

The issue, of course, at the FCC was not whether or not it is going to cause interference, but whether or not it would cause significant harmful interference. Harmful interference is a subjective standard. So far we have not been able to persuade the FCC that

it is going to cause harmful interference, so we are taking it to court.

But the point is that no matter what kind of testing you do and what kind of operation you do, DBS subscribers are not going to know that—they are going to know that their system does not work as well as it used to. They are not going to know that Northpoint is out there. They are not going to say, well, gee, this is too bad that Northpoint is causing interference to my system.

What they are going to say is, gee, my DBS system that used to be so reliable is no longer reliable, so I am going to go back to cable. That is going to be the result in the market. That is our con-

cern.

Senator SUNUNU. What interest would those technically competent people at the FCC possibly have in claiming that there would not be harmful interference when, at least in your opinion, there would be ruinous interference? How could the FCC be so

blind to what is or is not a technical reality?

Mr. WRIGHT. Well, Mr. Sununu, what Northpoint is proposing to do is to build 15,000 towers around the United States to provide their service. The closer you are to the service, the more interference your DBS system is going to receive. So while it is millions of DBS subscribers, it is certainly not all DBS subscribers; and what the FCC has decided is that the amount of interference, the increased amount of unavailability that Northpoint will introduce into the DBS system, is in their opinion offset by the introduction of a new player into the market. We disagree with that.

Mr. KIRKPATRICK. Senator Sununu.

Senator Sununu. Mr. Hazlett, you raised your hand first, and then we will hear from Mr. Kirkpatrick. Thank you.

Mr. HAZLETT. Thank you, Senator. I have read about what the FCC has said about the maximum allowable new interference, which by the way, there is possible interference from any new wireless service anywhere. If you had a zero tolerance policy you would have zero wireless service. So it is all about what is harmful and what is the de minimis standard.

So I have read what the FCC has concluded on this and it really is pennies, just pennies of interference, even if you take the maximum allowable interference on a monthly basis. Remember this: If you insert another competitor, and let us call this Multi-Channel Video for a minute, so you get two DBS, one cable and you add a fourth competitor; by the FCC's competitive analysis, that is going to lower prices by at least 5 percent, at least 5 percent.

The average DBS customer pays about \$60 a month in revenue right now. Five percent of that is \$3 a month. The loss to the DBS customer is not from harmful interference from the new entrant. The loss is from blocking the competition that is going to lower his or her price. So the economics of this are very, very straightforward and the FCC has decided this interference issue in a way that makes it very simple to see that keeping out the new entrant does not protect the current subscribers, but hurts them.

Mr. KIRKPATRICK. Senator Sununu, one other thing I would just like to add. Prior to the MITRE test, MDS America offered our equipment to the FCC for testing by MITRE and the FCC told us that Congress had not funded testing equipment for people who

had not applied in the NGSO window.

MDS America then offered to pay MITRE directly through the FCC for us to fund the test ourselves, at which time we were also informed that MITRE was prohibited by charter from taking private funding for doing the test. MDS America then hired an independent testing firm, LCC International out of McLean, who came to southern Florida and, pursuant to an FCC experimental license, did test our system independently of us in a real world environment, not in an anechoic chamber in a laboratory, but by actually putting our transmitter, our system, out on a tower in the presence of existing DBS customers and testing it over a period of several weeks.

We received no complaints whatsoever. We now are in the middle of a phase two testing where we have been broadcasting from the top of the tower at a much higher power level than the MVDDS order allows, but again pursuant to our experimental license, and again we have not received a single complaint of interference to DBS anywhere in southern Florida.

Senator Sununu. So you do not believe that your terrestrial-based broadcasting system will cause ruinous interference to existing DBS users?

Mr. Kirkpatrick. It has not since 1994 in the places it has been installed all over the world.

Mr. Wright. Mr. Sununu, may I follow up on that?

Senator SUNUNU. Sure.

Mr. Wright. There are already in this spectrum, in the 12.2 to 12.7 spectrum, there are already two ubiquitous consumer services. There is DBS and there is NGSOFSS. When we were required to negotiate by the two satellite systems that share it, NGSO and DBS, it is much easier for satellite-to-satellite to share than satellite-to-terrestrial. And when we negotiated that there was a requirement that the NGSO entrant into the market not increase the unavailability of DBS by more than 10 percent. So now we had that 10 percent of unavailability increase in the market.

The FCC itself has said that the introduction of Northpoint will cause an additional 30 percent increase in unavailability. We can quibble about the word ruinous, but to us increasing unavailability by 30 percent, and Commissioner Martin in his dissent said that

it could be 60 percent or 90 percent increase.

Senator Sununu. I am sorry, I do not understand that. If the

regulation is 30 percent, how could it be 90 percent?

Mr. Wright. What the FCC said is at a minimum the increase in unavailability will be 30 percent. Commissioner Martin in his dissent said, at 30 percent, you are not setting it at 30 percent; you are saying it could be 30 percent; it could be 60 percent, it could be 90 percent. So we think that it is a very serious challenge to our consumers.

What is going to end up happening here is you have got an industry that has spent a tremendous amount of money and energy and time to create a real competitor to cable and now you are going to introduce all of this additional. You are trying to shoehorn a third ubiquitous consumer service into this 12.2 to 12.7 band. It is unprecedented, and we think that it certainly will cause serious in-

terference to our consumers and will be anticompetitive and will reduce choice in the market.

Senator Burns. Well, Mr. Wright, in this bill, though, there is if there is any serious interference that they cannot operate there. I think that is the way it is worded, is it not, Senator Sununu?

Senator SUNUNU. That is correct, and I am curious to hear Ms. Bush's response to the suggestion that there will be a 30 percent

loss of performance.

Ms. Bush. I think that is an incorrect reading of the FCC order. The FCC came up with the way that both the satellite companies and the DBS, I mean, the terrestrial operators that are going to share the DBS band. The FCC set certain limits to ensure that at a consumer's home you would not cause interference above a certain level, which can be measured. It is a formula that you use similarly for the satellite companies and for the terrestrial companies.

The FCC did not conclude that at a minimum there would be 30 percent interference and I am, to be honest, not sure where that came from in the order. The FCC did not use a percentage as the basis for determining it, but an actual number, a power limit at which when you are at the consumer's home that would be it.

Northpoint was very comfortable with that. It is the same measurement that is used for determining whether there is interference caused by other satellite operators who are sharing the DBS band

and we think that is an appropriate way to go.

But again, I would go back to the point that what we are talking about is a situation where there has been a substantial amount of testing and testing done by the DBS operators themselves. The DBS operators themselves could have set up a DBS system in an apartment building in Washington when these tests were going on to prove that there was harmful interference. They had the opportunity to bring the FCC to that location to demonstrate harmful interference during their own testing, and they were not able to operate the system in a way that it did that.

Senator Sununu. Mr. Wright, last year there was some discussion about merging EchoStar and DirecTV and I think you suggested that that merger was very important, if not essential, to get local channels broadcast into all local markets. Does that mean that in the absence of the merger the industry is unable to perform that important function of getting local access into the local mar-

kets?

Mr. Wright. Senator Sununu, there is no question that local-into-local to all 210 markets is a very serious challenge to the DBS industry. As I pointed out in my testimony, when we got this authority in early 2000, we were hopeful that we would be able to serve 20 markets. We are already at 70 markets, which will provide service to about 85 percent or about 80 percent. By the end of this year we will be at 100 markets.

EchoStar has already said that, as you said earlier, technology marches on. And the industry has expended hundreds of millions of dollars, an extreme amount of money, in order to be able to put up spot beam satellites to extend the number of markets that we can serve. EchoStar is already targeting 150 markets, which would be over 90 percent of the population. And today, before the Senate

Commerce Committee, Rupert Murdoch said that if he is permitted to buy DirecTV that it is certainly his intention to do everything he can to dramatically increase the 100 markets that DirecTV is hoping to serve by the end of this year and that he hopes that he can reach 210 markets as soon as it is, I think he said, economically and technologically feasible.

So yes, I think eventually we will be able to do that.

Senator SUNUNU. Were you wrong then when you suggested that the merger of the two was essential to being able to achieve this goal of local-into-local?

Mr. Wright. Well, Senator, I never said that. But I think what was said by the companies as they were attempting to merge is that if, if the merger were able to go through, that it would certainly hasten the time, and they made it a commitment to serve all 210 markets. I do not think they ever meant that they would never be able to do so.

Senator SUNUNU. Ms. Bush, this local-into-local is obviously a perceived value of the terrestrial-based service. Could you speak a little bit more broadly about the kind of service that you would intend to offer and what parts of the country it would be ready to be deployed in a timely way?

Ms. BUSH. Thank you, Senator. Northpoint's technology was in fact invented to solve the local signal problem. The inventors of Northpoint recognized that DBS was not designed to provide local programming to small communities, that that's not the strength of a satellite system, and they designed the system to solve that problem.

It is our intention, and we have always viewed it as a critical part of our business plan, to serve all 210 local television markets with their local signals and other locally based community programming. I mean, that is the unique thing about having a system that will be built and deployed in each of the 210 television markets, is that it will have the ability to carry unique programming for that market, educational programming, programming directed to schools and universities, as well as local television signals.

In addition, that is what will also make our Internet system so robust, is that we will be building the system to serve communities in each market. So we think that is an important feature, which is one of the reasons why we are very pleased to see that the must-carry rules are part of S. 564.

Senator Sununu. It has been pointed out, and I think rightly so, that Northpoint I suppose has been working at this for a number of years, and we have gone through that, the delays, but you have not deployed a system before. This is something of a new venture and with any new venture there are always concerns about utilizing spectrum that might be provided through this piece of legislation or any others.

Would you support and do you support a firm time limit under which the service has to be provided, the spectrum has to be used, otherwise it reverts back to the public?

Ms. BUSH. Yes, we support the shorter buildout requirement that is contained in S. 564 of 5 years versus 10 years. In fact, 3 years ago Northpoint, testifying in another hearing, committed that we

would build our system within 2 years of receiving a license, and we still stand by that commitment.

Senator SUNUNU. Finally, back to a question where I was somewhat confused before, Mr. Wright. I was asking not about the existing fees that fund the FCC, but the administration's proposal to change the way that we license spectrum and collect fees for the utilization of spectrum on an ongoing basis. You may not be familiar with the budget proposal that was submitted by the President at the beginning of this year, but it would effectively allocate much more significant fees for the use of license.

My question was whether you support that proposal to the extent that it is applied effectively across all satellite or terrestrial-based DBS systems?

Mr. WRIGHT. Senator Sununu, I must apologize; I am not familiar with that proposal. However, I would say that in a situation—I think it has been proven through our experience that in a situation where you have multiple applicants for one piece of spectrum that the auction process is a very efficient way to allocate the spectrum.

If I may, I would also like to respond to something that Ms. Bush said just a few moments ago, which is that indeed the Northpoint business plan has morphed over the years and shifted pretty dramatically. I think the ultimate refutation of what Northpoint is proposing is the fact that their original proposal was to be an adjunct service to DBS, to be able to allow DBS, back before we ever imagined that we could do local-into-local, to give us a way to do that.

Believe me, Mr. Sununu, if our engineers had believed that, my company's engineers had believed, that that was possible without severe interference, they would have jumped at that opportunity, because being able to provide local-into-local is a key for us to be able to be truly competitive with cable and it is something that we have desired ever since day one and we have worked very hard to accomplish.

Senator Sununu. Mr. Hazlett, I am tempted to ask you to carry on a little bit about the efficiency of Federal spectrum auctions, particularly with regard to the Nextel process, but I do not think we quite have enough time.

Thank you very much, Mr. Chairman.

Senator Burns. We have got the building leased for all day.

[Laughter.]

Senator Burns. I have a question for Mr. Roadman. The investment climate has been difficult, to say the least, over the past few years since the passage of the LPTV Internet Act. Has progress been made since then and are you still hopeful that you will be able to offer wireless broadband under the terms of that pilot project?

Mr. ROADMAN. We are. For a number of years the primary mover in the LPTV spectrum was able to offer one-way successfully commercially. They were unable to raise funds, but did conduct a one-way test and a one-way commercial operation successfully.

We have put together the management team and the right mix to go forward if we can get financing to finance the test, and we believe that we will have that financing in 2003 and should be able to complete the test in 2003.

Senator Burns. I just wondered how that was coming because we have hit some rocky times and capital formation has been pretty

If the pilot project under this Internet Act proves successful, could wireless broadband be rolled out across the country over a low-power band?

Mr. Roadman. Yes.

Senator Burns. It can be done?
Mr. ROADMAN. Well, there are the existing stations, and we would need the help of Congress and the FCC to make the legislation-make it extend past the 13 legislative stations, to do that. But that is not a technology question; that is a legislative regulatory question.

Senator Burns. I think most of the questions have been asked that I wanted to ask, and we have had—I have always loved this kind of a give and take at the table because we learn a lot more

from that.

Is there anything else you want to explore there, Senator?

Senator Sununu. I simply want to thank the Chairman and the panelists. I know this is a fairly complex subject and, as I said in my opening, we have got bits of technology and spectrum issues, but at the end of the day I feel this is about doing what is right for the public and the consumers with regard to access and competition and giving them choices.

I appreciate you all being here to help shed some light on what we can do to either strengthen this bill or get this passed, to make

a difference for consumers.

Finally, I would just ask unanimous consent, Mr. Chairman, to enter a letter from Consumer's Union providing their views on S.

Senator Burns. Without objection, it shall be.

[The information referred to was not available at time of print.]

Senator Sununu. Thank you, Mr. Chairman.

Senator Burns. You know, I agree with you on most of that, but I will tell you also, I am always cautious. I am cautious that there is sometimes, there is unintentional consequences, and we will continue to explore where they may be and be pretty solid in our investigation and we would hope that we would come up with something fair, not only for the industry, too. You have got to take into consideration what is good for the industry and good for the consumers because both of them kind of got to grow together because they are the ones that provide the jobs and the opportunity at a lower price to the consumer, and of course that is a good thing.

I want to thank each of you for coming here today and sharing your thoughts. There will be some questions. Senator—the little guy that sat right here—Stevens—happy? We are going to call him the Good Humor man from now on—has a couple questions and I am sure he will forward those to you and if you could respond to him and the Committee that would be terrific, and any other Senator, and we will leave the record open for a couple of weeks.

Thank you again for coming. These hearings are closed. [Whereupon, at 4:12 p.m., the hearing was adjourned.]

APPENDIX

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

Thank you, Chairman Burns, and let me commend you for calling today's hearing to revisit two important issues—the assignment of licenses for Multichannel Video Distribution and Data Services (MVDDS), and the use of low power television to provide digital data services. Let me begin by welcoming today's witnesses and, in particular, a former staff member of the Committee, Toni Bush, who is here today to testify in her current capacity as the Executive Vice President of Northpoint.

In addition, let me welcome our colleague, Senator Landrieu who is here to give some remarks regarding her bill S. 564, The Emergency Communications and Competition Act, of which I am a proud cosponsor. This bill would direct the FCC to assign licenses for fixed terrestrial services such as MVDDS without an auction and would ensure prompt licensing and deployment of these services. We must remember that not all Americans live in a metropolitan areas. In fact many reside in rural and under-served areas such as Hawaii and Montana where there are not an abundance of service providers and where there is not ready access to high-speed data services.

Over the years, we have seen efforts to provide MVDDS spark a firestorm of controversy. DBS providers contend that terrestrial MVDDS that share frequencies can cause harmful interference. Would-be MVDDS providers dispute such claims and believe that the sharing of frequencies represents an efficient way to utilize spectrum. Yet another question strongly debated is whether these licenses should be subject to the FCC spectrum auction process. It is my hope that testimony from today's witnesses will help us get to the bottom of these disputes.

I am of the opinion that spectrum can be more efficiently utilized. Since there is a finite amount of spectrum available, we should encourage the development and deployment of technology that allows us to maximize the natural resources available to us.

I look forward to the testimony today and hope that we give MVDDS technology a chance to flourish in the best interests of the American people.

PREPARED STATEMENT OF HON. TRENT LOTT, U.S. SENATOR FROM MISSISSIPPI

Mr. Chairman, I want to thank you for holding this important hearing today on rural wireless broadband. As you know, my home state of Mississippi is a rural state, and I am always seeking ways to insure that the people of my state have access to the latest communications technology. I am especially interested in technology which is designed to equalize the options that are available to those people who live in rural areas.

When technology has been developed that can provide another competitive option

When technology has been developed that can provide another competitive option for constituents to receive multi-channel video and broadband services, naturally I am interested in insuring that this technology is made available in the marketplace.

Therefore, I was delighted to learn about new technology a few years ago that can provide multi-channel video and broadband services on a terrestrial system as another choice for Americans who live in rural areas. I am disappointed that the FCC's review and approval process for the deployment of Multichannel Video Distribution and Data Services—or MVDDS—took so long, and I regret that the Commission chose to auction the necessary licenses to operate this new terrestrial service.

In order to guarantee the most efficient and productive plan for deploying MVDDS technology, I believe that Congress must act. I am happy to join as a cosponsor of S. 564, the Emergency Communications and Competition Act of 2003, because it will speed up the deployment of this new technology and insure that Americans who live in rural areas will have another option for receiving affordable multichannel video and broadband services. An important key component of the bill is

its requirement that licensees must disseminate Emergency Alert System warnings

Mr. Chairman, this legislation directs the FCC to assign—rather than auction—licenses in the 12.2–12.7 gigahertz band for the operation of fixed terrestrial communications services. In this way, the MVDDS licensees—or Terrestrial Direct Broadcast Service licensees as the service is renamed in the bill, would be treated in the same way as their Direct Broadcast Satellite competitors who operate in the same spectrum band. The bill is fair and thoughtful in requiring that any company can compete in the license assignment process which can demonstrate that they have the necessary technology and legal rights to deploy such technology, and that their technology does not interfere with competing Direct Broadcast Satellite serv-

The public will receive additional benefits from this new multichannel video and data service, in that 4 percent of a licensee's capacity must be utilized for public interest offerings such as telemedicine and distance learning. I am pleased that li-censees operating in this new Terrestrial Direct Broadcast Service will also be required to comply with all rules governing the carriage of local television station signals, and all indecency and obscenity rules. Finally, the bill insures the speedy deployment of this new service by requiring the FCC to issue licenses to all qualified applicants within six months of its enactment, and it requires that authorized licensees build out their systems within five years.

I am looking forward to hearing the testimony of the witnesses today as we seek the most productive approach for deploying Multichannel Video Distribution and Data Services technology—which in the bill we are planning to call the Terrestrial Direct Broadcast Service. I am also interested in hearing about the progress we are making on other fronts as this Subcommittee does everything we can to guarantee that Americans who live in rural areas have the same competitive options to utilize the latest in wireless broadband technology.

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