

FEDERAL COMMUNICATIONS COMMISSION WASHINGTON

June 15, 2010

The Honorable John D. Rockefeller Chairman Committee on Commerce, Science and Transportation United States Senate 254 Russell Senate Office Building Washington, D.C. 20510

Dear Chairman Rockefeller:

Attached please find my responses to the additional post-hearing questions from my appearance before the Committee on April 14, 2010. Please let me know if I can be of further assistance.

Sincerely,

Julius Genachowski

Questions for the Record from Chairman John D. Rockefeller IV to FCC Chairman Julius Genachowski

As I noted at our hearing, in the near-term, I want the FCC to use all of its existing authority to protect consumers and pursue the broad objectives of the broadband plan. How, if at all, would classification of Internet access service as either a telecommunications service or information service affect efforts to address online copyright theft, computer viruses or spam, or cybersecurity?

RESPONSE: The D.C. Circuit's opinion in *Comcast v. F.C.C.* cast serious doubt on the legal theory the Commission used for the past few years to support its vital role with respect to broadband Internet access. I have shared with my fellow Commissioners a draft Notice of Inquiry for their consideration at the Commission's June 17 Open Meeting. This Notice would initiate an agency proceeding to seek public comment on how the Commission should best address the challenge that *Comcast* has handed us. It would seek comment on all options, and invite any ideas for how the Commission should proceed, including: maintaining the current "information service" classification of services such as cable modem and DSL Internet access; classifying broadband Internet connectivity service as a "telecommunications service" to which all the requirements of Title II of the Communications Act would apply; and a "third way" – similar to the highly successful approach that has been used for cell phone services since 1993 – under which the Commission would identify the Internet connectivity service that is offered as part of wired broadband Internet service as a telecommunications service and forbear from applying all provisions of Title II other than the small number that are needed to implement fundamental universal service, competition, and consumer protection policies.

As you know, Section 1 of the Communications Act explains that the Commission exists "for the purpose of the national defense [and] for the purpose of promoting safety of life and property through the use of wire and radio communication." Cybersecurity is a growing concern, and the Commission has recently begun two proceedings to assess our needs in this area: we have launched an inquiry on the ability of existing broadband networks to withstand significant damage or severe overloads as a result of natural disasters, terrorist attacks, pandemics or other major public emergencies; and we have begun a proceeding to seek public comment on the proposed creation of a new voluntary cybersecurity certification program that would encourage communications service providers to implement a full range of cybersecurity best practices. We will examine the records of these proceedings closely, along with the record generated in response to the Notice of Inquiry on our legal framework. To the extent that the Commission possessed the necessary authority to address cybersecurity, as well as online copyright theft, computer viruses or spam before *Comcast*, the "third way" I mentioned above would protect that authority. If, on the other hand, the Commission decides to maintain the information service classification, jurisdictional issues would be addressed on a case-by-case basis, in light of the particular details of the proposal at issue.

Senate Committee on Commerce, Science, and Transportation Hearing on Reviewing the National Broadband Plan April 14, 2010

I welcome your recent announcement that you, along with Chairmen Kerry, Waxman, and Boucher, intend to start a process to develop proposals to update the Communications Act. I welcome that process, and any new ideas that others may propose to address this issue, and the Commission stands ready to serve as a resource to Congress as it considers legislative changes in this area.

Questions for the Record from Senator Daniel Inouye to FCC Chairman Julius Genachowski

BROADBAND IN NATIVE COMMUNITIES

I appreciate and support the efforts of the Federal Communications Commission (FCC) to provide a special emphasis on the needs of Native Americans. Broadband adoption rates by those living on Tribal lands continue to be among the lowest of any population group. According to the FCC's data, fewer than 10 percent of those living on Tribal lands have terrestrial broadband available. Factors contributing to this situation include the rural nature of many of these lands and the lack of adequate broadband deployment. The plan also notes the similar circumstances facing Native Alaskans. I am most pleased with the FCC's expression that the plan's recommendations addressing Tribal communities are intended to include Native Hawaiians.

 Do I have your assurance that as you move forward with your efforts to improve broadband deployment and adoption in Native communities, you will take into consideration the unique needs of Native Hawaiian communities and take appropriate steps to fully address these needs?

RESPONSE: Yes. As the Commission moves forward in its efforts to improve broadband deployment and adoption in Native communities, we will most certainly take into consideration the unique needs of Native Hawaiians and work to address those needs. The National Broadband Plan is intended to bring broadband to all Americans. Many of the recommendations in the Plan will assist communities, including Native Hawaiians, that have fallen behind with respect to broadband deployment and adoption. The Plan also includes a number of recommendations to improve broadband deployment and adoption on Tribal lands specifically. We intend for as many of these recommendations to apply to Native Hawaiians as possible consistent with current and future law.

SPECTRUM RECOMMENDATIONS

• Can you outline the impact that "repacking" the broadcast band would have on Hawaii? As you know, Kauai is served by translators. How would the FCC's proposals affect this population? As we saw recently with tsunami warnings, this emergency service provided by these translator stations was essential to potentially saving lives. Moreover, Hawaii Public Television also serves the entire state with translators. Will this service be put in jeopardy?

RESPONSE: Much more work needs to be done before establishing a repacking plan. We plan in the near future to hold a Broadcast Engineering Forum with industry to discuss various approaches to reallocation and repacking the TV broadcast spectrum, therefore we cannot predict at this time what the specific impact might be on Hawaii or any other area. However, we recognize the value and importance to the public of continuing to maintain a viable broadcast television service. For example,

as you observe with respect to the tsunami warnings provided by TV translators on Kauai, TV stations provide important services that must be preserved. We will seek to minimize the impact on television service from recovery of spectrum, and no stations will be required to cease operations. The plan under consideration for recovery of broadcast television spectrum contemplates incentives where stations would voluntarily share or otherwise yield their channels, allowing channels to be repacked more efficiently and freeing spectrum for new wireless services. Like stations elsewhere in the country, stations in Hawaii, both full service and low power (including translators) could be required to change channels to facilitate repacking. However, no broadcaster would have to go off the air. The Commission will carefully consider the interests of television broadcasters and the public as it proceeds with the recovery of spectrum for new broadband uses.

• To follow up on this point, what does "repacking" and channel sharing mean for over-the-air HD? I also understand that the majority of Honolulu TV stations are multi-casting new content. What would happen to this service? Will my constituents need to rescan digital TV's and converter boxes? If channels are moved will my constituents need to purchase new antennas?

RESPONSE: Re-packing by itself would have little or no impact on a station's ability to provide HD or any multicast services it may choose to offer. With respect to channel sharing, information gathered in preparation of the National Broadband Plan indicates that two stations sharing a channel should each be able to provide HD, or some combination of multicast SD and mobile program services. Arrangements involving sharing between more than two stations could limit the service options of individual broadcasters in such arrangements to some extent and, in particular, their ability to provide HD, multicast, and mobile services simultaneously. Any such outcome would be the result of voluntary action by the affected broadcaster, and would not be imposed by the re-packing plan recommended in the National Broadband Plan.

Any rearrangement of television channels, which includes re-packing, would require viewers to rescan their digital television receivers and converter boxes. Also, viewers might need to obtain new antennas in cases where local stations would 1) re-locate to a new transmitter at a site farther away or 2) move to low VHF channels (channels 2-6) and a viewer's antenna does not already include a capability for effective reception of low VHF signals.

 Hawaii broadcasters have expressed some concerns with the voluntary nature of your spectrum proposals. How would the Commission proceed if no local broadcasters agree to "share" channels or turn in their licenses all together?

RESPONSE: For the Plan to work, we don't need all, or even most licensees to voluntarily reducing use of UHF spectrum by going off the air, channel sharing or moving to the VHF band. I believe, and the staff at the FCC believes, that a voluntary approach can work, and our goal is to first employ all possible voluntary mechanisms. We believe a voluntary approach with proceeds sharing will allow the market to determine the best use of spectrum, allowing the right amount of spectrum demand by the market to flow to its highest valued use while creating value for everyone in that chain of

stakeholders (broadcasters, consumers, and broadband providers). We intend to focus our efforts on voluntary mechanisms so as to best ensure their success.

• Can you further elaborate on spectrum user fees and the how you envision the Commission proceeding with them?

RESPONSE: The National Broadband Plan calls on Congress to grant the FCC and NTIA authority to impose spectrum fees, but only on spectrum that is not licensed for exclusive flexible use. In my view, spectrum fees can serve some of the same effects that a well-functioning market produces by compelling spectrum users to recognize the value to society of the spectrum that they use.

BROADBAND SPEEDS

The National Broadband Plan (NBP) proposes a goal of having 100m homes subscribed at 100mbps by 2020 while the leading nations already have 100Mbps fiber-based services at costs of \$30 TO \$40 per month and beginning rollout of 1Gbps residential services, which the FCC suggests is required only for a single anchor institution in each community by 2020. This appears to suggest that the U.S. should accept a 10 to 12 year lag behind the leading nations.

• What is the FCC's rationale for a vision that appears to be firmly rooted in the second tier of countries?

RESPONSE: The National Broadband Plans sets forth a vision for the United States to lead the world in the number of homes and people with access to affordable, world-class broadband connections. The 100-squared initiative, which is an aspiration goal of providing 100 million homes with access to 100 Mbps download speeds by 2020, will help ensure America's global competitiveness in the 21st century. A widespread level of affordable high-speed connectivity will encourage innovators to develop the next generation of cutting-edge applications. As a milestone, by 2015, 100 million U.S. homes should have affordable access to actual download speeds of 50 Mbps and actual upload speeds of 20 Mbps.

The Plan also sets forth recommendations designed to spur research and development, which are also key aspects of ensuring that America remains a broadband world leader. In particular, the Plan recommends a renewed focus on a federal broadband research and development funding agenda, which includes broadband networks, equipment, services and applications. For U.S. companies to continue to be leaders in high-value areas of the global broadband ecosystem, they must continue to generate and benefit from scientific innovation.

Moreover, the Plan's universalization targets of 4 Mbps download and 1 Mbps upload is aggressive. It is one of the highest universalization targets of any country in the world. Many nations, such as South Korea and Finland, adopted short-term download targets around 1 Mbps. The Plan recommends reevaluting the 4 Mbps target every year so this target may rise over time, which will ensure that Americans continue to receive high quality broadband access at an affordable rate, and that

consumers in rural areas will continue to receive broadband service that is reasonably comparable to the service provided in urban areas.

• 100Mbps service typically costs \$100 per month in the U.S., or about 3 times that of other countries, and some have claimed that these costs will go up under the proposed Plan. We already know that price is one of the barriers to broadband adoption in this country. What is the FCC's vision for how prices in the U.S. should compare to other developed nations, and how will this be achieved?

RESPONSE: One of the goals of the Plan is for every American to have access to robust broadband service at an affordable price. The Commission intends to achieve this and other goals through policies that ensure robust competition, and as a result, maximize consumer welfare, innovation and investment. Although the price of broadband service is relevant to achieving our goal, no single metric can provide an adequate basis for comparison particularly given differences between the U.S. and other developed nations in measures of household income, market and political structures, demography and geography.

Pursuant to the Broadband Data Improvement Act, the FCC will continue to assess its international standing as part of the annual report required by Section 706 of the Communications Act. The report intends to compare the extent of broadband service capability, including information about transmission speeds and price, in a total of 75 communities in at least 25 countries. Part of this review involves comparing relevant similarities and differences in each community, including their market structures, level of competition, the types of technologies deployed, applications and services those technologies enable, the regulatory models, types of applications and services used, and information about business and residential use of such services. This information will help the Commission staff evaluate our country's standing relative to other developed nations based on several parameters, which will provide a more holistic comparison than price alone.

• Is the FCC committed to promoting the availability of symmetric broadband services which can enable telework, home-based entrepreneurship, home-based health care and more?

RESPONSE: The National Broadband Plan included many recommendations meant to remove barriers to and promote telework and support entrepreneurship, as well as modernize health IT. The Plan recommended that Congress consider eliminating tax and regulatory barriers to telework and that the federal government should promote telework internally. I welcome the opportunity to discuss any other ideas you may have on promoting these home-based options.

While the NBP tasks the FCC with the commendable goal of ensuring all Americans have access to broadband, it does not ensure that all Americans will receive comparable affordable services. In reality, the 100 squared plan (100 million households receiving 100 Mbps) will likely be implemented in urban areas, while rural Americans are only assured of a speed of 4 Mbps.

 Are we no longer committed to ensuring that all Americans receive comparable affordable communication services?

RESPONSE: The Commission remains committed to ensuring that Americans in all regions of the nation have access to telecommunications and information services that are reasonably comparable to those services provided in urban areas and at rates that are affordable and reasonably comparable to rates charged for similar services in urban areas, as required by section 254 of the Communications Act. I believe that 4 Mbps broadband service is, in fact, reasonably comparable to the broadband service provided in urban areas today. Although the National Broadband Plan set an aspirational goal of 100 Mbps, the median speed of broadband service purchased by consumers today is 4 Mbps, and only 6 percent of consumers subscribe to broadband service that exceeds 10 Mbps. Moreover, it is important to balance the cost of funding universal service against the burdens on consumers who contribute into the fund. While I believe that 4 Mbps is an appropriate target today, I am committed to revisiting that target every four years and adjusting it as circumstances change. Doing so will ensure that there is no digital divide in this country.

• Will this lead to a bandwidth divide between urban and rural Americans?

RESPONSE: As discussed above, 4 Mbps is the median speed of broadband service currently purchased by consumers and is therefore an appropriate target today. I am committed to revisiting that target every four years and adjusting it as circumstances change to ensure that services in rural areas are reasonably comparable to broadband services in urban areas. Doing so will ensure that there is no digital divide in this country.

SUPPORT FOR RURAL CARRIERS

Under the NBP, rural communication carriers would be required to move from "rate of return regulation" to "price cap regulation." Under rate of return regulation, rural telecommunications providers have been able to invest in the build-out of broadband infrastructure that is meeting the growing needs for bandwidth across rural America.

 Why would it be good public policy to abandon the rate of return regulatory system that has already allowed the deployment of broadband to many rural, high-cost areas of the country?

RESPONSE: The National Broadband Plan sets forth a vision to provide broadband access to all Americans, regardless of where they live and regardless of the regulatory classification of their carrier. Many providers, including both price cap and rate-of-return carriers, have made significant investments in broadband, and the Plan outlines ways to reduce costs, such as pole attachment and rights of way reform, to promote further investment to ensure all Americans have access to broadband. Yet, the Plan also recognizes that there are some geographic areas that lack a private business case to deploy broadband. Doing nothing would lead to a growing digital divide, which is not an option.

As one critical step to achieve the goal of universal broadband, the Commission must reconfigure the current High-Cost universal service fund, which is designed to support voice service, to a new universal service program, described in the Plan as the "Connect America Fund," that will provide support for broadband networks capable of providing voice services. As part of this conversion, the Plan recommends moving rate-of-return carriers to incentive regulation. The Plan does not, however, specify the type of incentive regulation, such as price cap.

A shift from rate-of-return to incentive regulation advances both to the general goal of ensuring widespread deployment of broadband networks and the specific tool of universal service reform. Rate-of-return regulation was implemented at a time when monopoly providers offered regulated voice telephone service over copper wires in a particular geographic area. Such an era no longer reflects the reality of converging technologies and competition in the 21st century broadband world. Indeed, a growing number of rural carriers have voluntarily elected to convert to price cap regulation to become more efficient and competitive. Moreover, the conversion to incentive regulation could help limit growth in the legacy High-Cost universal service fund while the Commission moves to adopt a more efficient and targeted funding mechanism for government support for broadband investment.

Incentive regulation could take many forms. Indeed, the majority of states have already recognized the benefits of moving to some form of incentive regulation – with over 30 states having already eliminated rate of return regulation for local rates. States have found it possible to craft regimes that provide the necessary stability for ongoing investment. The Commission is seeking comment on the recommendation in the Plan, including the proposal to move to incentive regulation. The Commission also asks parties to suggest other alternatives that would allow the Commission to achieve the National Broadband Plan goals of world-leading, affordable broadband service for all Americans. The Commission welcomes and encourages all interested parties to provide suggestions, data and recommendations in response to the Notice.

The NBP says that the FCC should "include market-based mechanisms to determine the firms that will receive Connect America Fund support and the amounts they will receive."

Can you give some examples of what this market-market based mechanism might be?

RESPONSE: The National Broadband Plan recommends that the Connect America Fund should rely on market-based mechanisms where appropriate to determine the entities that should receive support and how much support should be provided. On April 21, 2010, the Commission adopted a Notice of Inquiry and Notice of Proposed Rulemaking, which sought comment on a procurement auction mechanism proposed by 71 economists. In addition, the Commission previously sought comment on competitive bidding, including reverse auctions. Requests for proposals (RFPs) or other procurement processes are additional examples of market-based mechanisms that could be used to determine which entities should receive support and support levels.

• As changes to the price regulation structure are made, and market-based mechanisms are implemented to determine which providers will receive support, what consideration has been

given to the billions of dollars in loans rural telecommunication providers have borrowed from the Rural Utilities Service (RUS), as well as private sector financiers Rural Telephone Finance Cooperative (RTFC), CoBank, and others, to continue to expand and improve broadband services to their customers in rural America? Do you believe these investments might be put in jeopardy as these policy shifts move forward and create uncertainty in the market?

RESPONSE: The Commission staff met with RUS and CoBank, among others, on a variety of occasions to exchange ideas and get their input as we developed recommendations for the Plan. The recommendations in the Plan call for a staged and measured transition to enable the industry time to prepare and make adjustments. The Plan recommends the creation of a Connect America Fund to support broadband service in areas that otherwise would not have access to broadband because the costs of serving such areas exceed the revenues. In other words, the Plan recommends providing support to geographic areas that lack a private sector business case to justify deployment and the provision of service — areas that therefore would not have any broadband access absent public support.

I believe we should ensure that communities that have already have access to broadband today continue to have such access in the future. An important component of the Plan's recommendations is the recognition that some areas will require ongoing support from the new Connect America Fund to maintain broadband service. The Commission is in the process of implementing these recommendations and looks forward to receiving input from RUS, CoBank and others on how to craft rules that will create a stable environment for ongoing investment in rural America.

COORDINATION BETWEEN FCC AND RUS

Please describe the steps that have been taken by the FCC to coordinate with the RUS to ensure
that decisions made by the FCC, and its related entities such as the National Exchange Carrier
Association (NECA), do not put into jeopardy investments made by rural carriers and the
underlying loans that made such investments possible.

RESPONSE: The Commission staff had a variety of meetings with the leadership and staff at RUS, as well as meetings with NECA and representatives of rural carriers, including OPASTCO, WTA and NTCA to receive input on the development of the Plan. We will continue to meet with RUS, NECA and other interested stakeholders throughout the rulemaking process to solicit input and factual information that will enable the Commission to craft workable policies that will ensure that all Americans have access to broadband.

LEGAL FRAMEWORK OF THE FCC'S IMPLEMENTATION OF THE PLAN

Chapter 17 of the plan includes a section on the legal framework for the FCC's implementation of the plan. In your testimony you stated that your counsel, along with interested outside counsel, are evaluating different options and possibilities. Concerns have been raised about the impact that the

uncertainty of future actions by the FCC would have on decisions by broadband providers to invest in upgrades or expand service.

- How realistic are these concerns?
- What actions can the FCC take now to allay these concerns and to provide an environment that will continue to create jobs and stimulate investment and innovation?

RESPONSE: Promoting continued investment and job creation, both in the core broadband networks and through Internet-based services and applications that ride on such networks, is a key priority for the FCC and a key focus of the National Broadband Plan. The private sector is the key to investment and job creation, but government policy can help facilitate those outcomes, including through recommendations of the National Broadband Plan to spur broadband deployment and adoption, such as universal service reform. Telecommunications policy must take account of current market and technological realities.

After the National Broadband Plan was released, the United States Court of Appeals for the District of Columbia Circuit released its decision in Comcast Corp. v. FCC, 600 F.3d 642 (D.C. Cir. 2010). The Comcast decision casts serious doubt on whether the legal framework the Commission chose for broadband Internet services nearly a decade ago is adequate to achieve core broadband policies, which prior Commissions thought they had legal authority to implement. To confront this challenge, I have shared with my fellow Commissioners a draft Notice of Inquiry for their consideration at the Commission's June 17 Open Meeting. This Notice would initiate an agency proceeding to seek public comment on how the Commission should best address the challenge that Comcast has handed us, including how the agency can foster predictability and promote innovation and investment. It would seek comment on all options, and invite any ideas for how the Commission should proceed, including: maintaining the current "information service" classification of services such as cable modem and DSL Internet access; classifying broadband Internet connectivity service as a "telecommunications service" to which all the requirements of Title II of the Communications Act would apply; and a "third way" similar to the highly successful approach that has been used for cell phone services since 1993 - under which the Commission would identify the Internet connectivity service that is offered as part of wired broadband Internet service as a telecommunications service and forbear from applying all provisions of Title II other than the small number that are needed to implement fundamental universal service, competition, and consumer protection policies.

As you know, Chairmen Rockefeller, Waxman, Kerry, and Boucher have announced they will start a process to develop proposals to update the Communications Act. I welcome that process, and any new ideas that others may propose to address this issue, and the Commission stands ready to serve as a resource to Congress as it considers legislative changes in this area.

Questions for the Record from Senator John Kerry to FCC Chairman Julius Genachowski

Jurisdictional Questions

Writing on the effect of the recent court decision on the National Broadband Plan, the FCC General Counsel wrote, "yesterday's decision may affect a significant number of important Plan recommendations. Among them are recommendations aimed at accelerating broadband access and adoption in rural America; connecting low-income Americans, Native American communities, and Americans with disabilities; supporting robust use of broadband by small businesses to drive productivity, growth and ongoing innovation; lowering barriers that hinder broadband deployment; strengthening public safety communications; cybersecurity; consumer protection, including transparency and disclosure; and consumer privacy."

 Mr. Chairman, given these specific communities and issues that the decision places at risk, how long can the FCC examine the decision before taking action?

RESPONSE: I intend to address the Commission's legal framework for broadband by the end of this year. As you know, after the National Broadband Plan was released, the United States Court of Appeals for the District of Columbia Circuit released its decision in Comcast Corp. v. FCC, 600 F.3d 642 (D.C. Cir. 2010). The Comcast decision casts serious doubt on whether the legal framework the Commission chose for broadband Internet services nearly a decade ago is adequate to achieve core broadband policies, which prior Commissions thought they had legal authority to implement. To confront this challenge, I have already shared with my fellow Commissioners a draft Notice of Inquiry for their consideration at the Commission's June 17 Open Meeting. This Notice would initiate an agency proceeding to seek public comment on how the Commission should best address the challenge that Comcast has handed us. It would seek comment on all options and invite any ideas for how the Commission should proceed, including: maintaining the current "information service" classification of services such as cable modem and DSL Internet access; classifying broadband Internet connectivity service as a "telecommunications service" to which all the requirements of Title II of the Communications Act would apply, and; a "third way" – similar to the highly successful approach that has been used for cell phone services since 1993 - under which the Commission would identify the Internet connectivity service that is offered as part of wired broadband Internet service as a telecommunications service and forbear from applying all provisions of Title II other than the small number that are needed to implement fundamental universal service, competition, and consumer protection policies.

I welcome your recent announcement that you, along with Chairmen Rockefeller, Waxman, and Boucher, intend to start a process to develop proposals to update the Communications Act. I welcome any new ideas that others may propose to address this issue, and the Commission stands ready to serve as a resource to Congress as it considers legislative changes in this area.

• I was here in 1996 and I can assure you that I never meant for cable and telephone broadband internet service providers to fall outside the authority of the FCC to protect consumers, protect against discrimination, ensure that people with disabilities are given consideration, or ensure that modern communications are available to everyone in America. Given the history of communications policy, would it not fall outside of our values to have a central communications service not subject to the jurisdiction of the Federal Communications Commission?

RESPONSE: Congress created the Federal Communications Commission with an explicit mission: "to make available, so far as possible, to all people of the United States... A rapid, efficient, Nation-wide, and world-wide wire and radio communications service with adequate facilities at reasonable charges, for the purpose of the national defense, [and] for the purpose of promoting the safety of life and property through the use of wire and radio communication." Broadband is increasingly essential to the daily life of every American. It is fast becoming the primary way we as Americans connect with one another, do business, educate ourselves and our children, receive health care information and services, and express our opinions. That is why in March, a unanimous FCC said in our Joint Statement on Broadband that "[w]orking to make sure that America has world-leading high-speed broadband networks—both wired and wireless—lies at the very core of the FCC's mission in the 21st Century."

The FTC Option

Mr. Chairman, some have argued that you should cede authority over broadband service to the FTC until and unless the Congress writes a new law. Yet the FTC has no clear rulemaking authority to benefit consumers in policy matters such as universal service reform, lifeline/linkup for broadband, emergency communications policies, and accessibility for the disabled. And limits to its rulemaking authority make it unlikely the FTC could implement the specific goals of the FCC's national broadband plan, such as increased transparency on broadband service speeds, truth-in-billing reform, and increased privacy protections. Also, the FTC has no clear proactive rulemaking capability to promote competition policy, through policies such as data roaming, interconnection, or pole attachment rate reform. These policies are key components of the FCC's national broadband plan.

• Mr. Chairman, what do you say to those who argue that the FCC should cede its authority over communications over broadband to the FTC?

RESPONSE: In the decades since Congress created the Commission, the technologies of communications have changed and evolved, and with the guidance of Congress, the Commission has tailored its approach to these changes. But the basic goals have been constant: to encourage private investment and the building of a communications infrastructure that reaches all Americans wherever they live; to pursue meaningful access to that infrastructure for economic and educational opportunity and for full participation in our democracy; to protect and empower consumers; to promote competition; to foster innovation, economic growth, and job creation; and to protect Americans' safety. While the FCC will continue to work closely with our sister agencies including the

Federal Trade Commission and the United States Department of Justice on issues of mutual concern, I believe the FCC has a unique and vital role in achieving these goals.

The Need for a National Plan

Mr. Chairman, Section 706 of the Telecommunications Act of 1996 requires the FCC to determine whether "advanced telecommunications capability [i.e., broadband or high-speed access] is being deployed to all Americans in a reasonable and timely fashion." If this is not the case, the Act directs the FCC to "take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market."

• Mr. Chairman, how does your plan remove barriers to investment and promote competition in the telecommunications market in accordance with the direction in the 1996 Act?

RESPONSE: Many of the recommendations in the National Broadband Plan focus on removing or reducing barriers to investment and competitive entry. In particular, the Plan focuses in several areas on the key input components of broadband infrastructure and service deployment. For example, this month the Commission is scheduled to implement the Plan's recommendations regarding utility pole attachments, allowing the use of existing infrastructure for the deployment of fiber and wireless networks to provide next generation services. Also, the Plan makes several recommendations to improve the availability of spectrum, which is a crucial ingredient for many new broadband services. In addition, the Plan recommends significantly reforming the universal service program to ensure that broadband services are being deployed effectively and efficiently throughout the nation.

The Broadband Gap -- The Pursuit of Equity for Rural America and the Working Poor

Nearly 100 million Americans are not connected to the Internet. According to your report, "they are older, poorer, less educated, more likely to be a racial or ethnic minority, and more likely to have a disability than those with a broadband Internet connection at home." Cost remains the primary barrier to entry, and limited digital proficiency, especially among seniors and the less educated, is also cited as a reason for this gap. And children in the inner city and many rural areas lack the textbooks, tools and teachers to help improve their readiness for the digital economy. I understand that not all Americans will have access to the same level of broadband service, but I believe we should be making a basic level of service available to everyone at an affordable rate.

• In the 20th century, we determined that Americans needed access to the predominant communications network of that time, telephone service, to get a job, to connect with each other, and to be able to access health and emergency services. How are those values reflected in your plan for broadband service and do Americans need broadband service for those purposes today?

RESPONSE: As more aspects of daily life move online and offline alternatives disappear, the range of choices available to people without broadband narrows. Getting a job is more difficult without access

to online postings and the ability to submit applications online. Students without broadband lack access to the same level of information as their connected peers, and attempts to find medical information without access to online health sources limits patients' knowledge, choices and care. People without a broadband connection will certainly not experience the potential benefits of broadband—increased earning potential, enhanced connections with friends and family, improved health and a superior education. Recommendations in the National Broadband Plan reflect the importance of equality of access to broadband service by setting a path to extend broadband networks through public investment in privately owned infrastructure. The Plan also includes a variety of recommendations to reduce barriers to adoption of broadband—cost, digital literacy and relevance.

• Mr. Chairman, I am worried about those kids who have no Internet service at home even though Comcast serves Boston. And I worry about the towns in Western Massachusetts subject to only one provider of service, partially served by only one provider, or lacking service all together. What do you say to those who argue that you should only focus on those completely without access to the Internet and leave the market alone as it relates to competition or urban affordability?

RESPONSE: The National Broadband Plan addresses all of these issues – connecting the unserved, spurring competition, and foster adoption to address cost barriers for low-income consumers. To connect the unserved, the Plan sets forth a path to connect everyone to broadband, which include, among other things, transitioning the universal service fund to support broadband.

But, the Plan is not limited to connecting the unserved. Rather, the Plan contains multiple recommendations that will foster competition across the ecosystem. They include the following:

- Collect, analyze, benchmark and publish detailed, market-by-market information on broadband pricing and competition, which will likely have direct impact on competitive behavior (e.g., through benchmarking of pricing across geographic markets). This will also enable the FCC and other agencies to apply appropriate remedies when competition is lacking in specific geographies or market segments.
- Develop disclosure requirements for broadband service providers to ensure consumers have the pricing and performance information they need to choose the best broadband offers in the market. Increased transparency will incent service providers to compete for customers on the basis of actual performance.
- Undertake a comprehensive review of wholesale competition rules to help ensure competition in fixed and mobile broadband services.
- Free up and allocate additional spectrum for unlicensed use, fostering ongoing innovation and competitive entry.
- Update rules for wireless backhaul spectrum to increase capacity in urban areas and range in rural areas.
- Expedite action on data roaming to determine how best to achieve wide, seamless and competitive coverage, encourage mobile broadband providers to construct and build networks, and promote entry and competition.
- Change rules to ensure a competitive and innovative video set-top box market to be consistent with Section 629 of the Telecommunications Act. The Act says that the FCC should

- ensure that its rules achieve a competitive market in video "navigation devices," or set-top boxes—the devices consumers use to access much of the video they watch today.
- Clarify the Congressional mandate allowing state and local entities to provide broadband in their communities and do so in ways that use public resources more effectively.
- Clarify the relationship between users and their online profiles to enable continued innovation and competition in applications and ensure consumer privacy, including the obligations of firms collecting personal information to allow consumers to know what information is being collected, consent to such collection, correct it if necessary, and control disclosure of such personal information to third parties.

Further, the Plan also contains a variety of recommendations to increase adoption, including ways to address cost barriers to broadband adoption and utilization. In particular, the Plan recommends that the Commission expand Lifeline Assistance (Lifeline) and Link-Up America (Link-Up) to make broadband more affordable for low-income households. In addition, the Plan recommends that the Commission consider free or very low-cost wireless broadband as a means to address the affordability barrier to adoption.

 Mr. Chairman, you have repeatedly applauded a cable industry program offering half priced service for two years for low income families with children in public middle school. It is called the A+ program. How many communities have signed up for that program and what could be done to make it more attractive?

RESPONSE: The cable industry has proposed the Adoption Plus (A+) program as a two-year pilot of a public-private partnership that would be designed to promote sustainable broadband adoption for middle-school aged children in low income households that do not currently receive broadband service. The cable industry suggested that the federal government provide funding to implement the pilot.

The A+ proposal provides an example of private industry taking initiative and offering solutions to partner with other stakeholders and provide comprehensive solutions for overcoming multiple barriers to adoption for low-income school children. This program has not yet been implemented, so many details of the program may need to be refined to make sure that it is attractive for communities, competitively neutral, and effective.

Several other efforts, such as Computers for Youth and Computers for Families, provide comprehensive solutions targeting low-income school-aged children and their families, and these programs could also serve as models for a national pilot program.

The City of Boston applied for a BTOP grant to have municipal broadband service delivered to
poor communities. It was rejected because there is cable modem and DSL service available
there. But your study cites that cost remains the primary barrier to service for the working
poor. If the private sector is not making some level of service available to low income

consumers at a very low price or for free, shouldn't cities and municipalities have the opportunity to provide those services?

RESPONSE: The Commission is not involved with the evaluation or review of the Broadband Technology Opportunities Program (BTOP) so the Commission is unable to comment on the specifics of the City of Boston's application or the merits of their proposal. Concerns regarding the BTOP process should be directed to NTIA. The Plan recommends that Congress make clear that state, regional, and local governments can build broadband networks. Though municipal broadband has its risks and may discourage private investment, the Plan suggests that in the absence of private investment sufficient to meet local needs, towns and cities should have the right to move forward and build networks that serve their constituents as appropriate.

Broadband Competition Issues

Mr. Chairman, both the DOJ and the NTIA submitted comments for the plan explaining that very few firms control the market for high-speed Internet access in the U.S. Most people have at most a choice of two providers who use broadband service to leverage the sale of a bundle of other services. The Harvard Berkman Center also submitted a study as part of your deliberation that concluded it was necessary to open incumbent telephone and cable networks for wholesale use by new entrants that want to provide competing services to people's homes.

• I know that this is a highly contentious issue and I think it speaks to the moderate approach you took to the construction of this plan that the issue is not directly addressed in your report. I agree that we should try better consumer disclosure and more wireless competition first, but how will the Commission determine whether and in what form it might be necessary to open the wires up to competition if the spectrum and disclosure policies you have proposed do not drive higher speeds and more competitive services? Is there anything different about the market of broadband services for small businesses that requires more heightened consideration of competition issues?

RESPONSE: The Commission, through its implementation of various provisions in the Communications Act, already requires many incumbent local phone companies to share certain inputs from their networks with competitors. The National Broadband Plan recommends that the Commission review the hodgepodge of requirements for network sharing and develop a comprehensive framework to ensure that broadband inputs, particularly for small business services, are widely available. As a part of this review, the Commission will also consider a variety of proposals for access to incumbent facilities. The Commission plans to review the needs of small businesses separately from those of residential users as the needs and services available to meet those needs may differ.

• In wireless, given the dominance of two carriers in the market today, what is your benchmark for success in making the wireless broadband industry more competitive?

RESPONSE: There are few areas in communications that present greater promise for our country than mobile – in terms of driving our economy and delivering broad opportunity for all Americans – and our goal must be for America to lead the world in mobile. To promote this goal, we must ensure that American consumers have access to competitive broadband data communications services whenever they want and wherever they are, and also ensure that the United States has the fastest and most extensive mobile networks in the world.

Competition is important for many reasons, including, of course, that it produces low prices and high quality for consumers. Competition also drives invention and innovation which makes it especially important in a fast-changing marketplace like communications.

For its 14th Annual Mobile Wireless Competition Report, we have undertaken a broader and more comprehensive analysis of the wireless industry than the Commission has conducted in years past. The Commission's competition policy will be fact-based and data-driven, and intended to support innovation and investment in the manner that best serves American consumers.

Public Safety

I am committed to doing whatever we need to do and spending what we need to spend to ensure that if another natural or terrorist disaster hits the United States our first responders are not left unable to communicate.

Did the FCC propose a system that will require police, fire, and emergency service agencies to
rely on commercial carriers for their mission-critical broadband communications needs because
commercial carriers have provided you with some assurance that it will be made open for use by
public safety officials? What is the advantage of going commercial rather than allocating it
directly to public safety officials? As you know, scores of public safety agencies have expressed
concern with that proposal.

RESPONSE: The National Broadband Plan proposes a comprehensive strategy for creating a nationwide interoperable broadband network for our nation's police, fire and emergency services agencies. Under the Plan, these agencies will have full use of the 10 megahertz of dedicated 700 MHz spectrum that has already been allocated for public safety broadband services. This spectrum will meet public safety communications needs during normal operations and during most emergencies. In the rare cases where additional capacity is required, public safety users will have priority access to commercial networks, including in the 700 MHz D Block. This overall strategy is the best means of providing public safety users with adequate broadband capacity while enabling them to leverage 4G commercial deployments in the 700 MHz band to significantly reduce costs.

Pending at the Commission are more than one dozen waiver requests filed by small and large jurisdictions, including Boston, that want to start constructing such a network right now. These jurisdictions seek to use the 10 MHz of spectrum already in the hands of the Public Safety Spectrum

Trust, dedicated specifically to public safety in a manner that will be compliant with the Commission's broader public safety policies and standards.

• Chairman Genachowski, can you provide the committee with your opinion on these waiver requests and when you expect the Commission to act on them?

RESPONSE: The Commission recently released an order granting conditional waivers for early deployment to twenty-one petitioners, including Boston. Each waiver recipient is required under the order to adhere to certain technical specifications, such as mandatory use of the LTE 3GPP Release 8 air interface, which is the version that major carriers have announced they will be deploying starting this year, and to submit detailed plans for achieving interoperability with other networks. We also expect that such submissions will include a discussion of any specialized equipment, features description of any specialized equipment, feature or application, and how it will be used to further public safety purposes, and how its use will conform to the Commission's stated interoperability goals. This order will enable the waiver recipients to move forward with their broadband deployment plans while preserving the Commission's long-term goals for nationwide interoperability.

Broadcast Television Spectrum

Mr. Chairman, if I understand correctly, you have suggested a program by which you have indicated that some broadcasters would submit spectrum that they have licensed but not allocated in exchange for some portion of auction receipts, thereby creating a win-win for them and wireless broadband users. And there is some room there for consideration. In the top 10 TV markets, a median of 20 channels out of 49 are directly being used by full-power broadcasters or to put it another way 120 out of nearly 300 MHz are occupied and the rest are lying fallow.

As you know, the broadcast spectrum proposal has met with much skepticism and my broadcasters back home are no exception. I know that this spectrum is the equivalent of beachfront property on the airwaves. But I cannot support moving forward until I hear from my broadcasters that it is workable and truly a win-win.

 Can you elaborate more on channel sharing proposals in your plan? From what my broadcasters say, channel sharing would strip consumers of the ability to watch HD, multi-cast and mobile TV programming over-the-air. Is this accurate?

RESPONSE: As discussed below, channel sharing would not limit consumers' ability to watch HD, multicast, and mobile TV programming over-the-air. Under the approach described in the National Broadband Plan, channel sharing would be a voluntary option for broadcasters to reduce their operating costs and provide a potential source of capital for investment into programming. If a broadcaster chose not to participate, their broadcast services would not change from what they are today. With respect to station services under channel sharing, information gathered in preparation of the National Broadband Plan indicates that two stations sharing a channel should each be able to provide HD, or some combination of multicast SD, and mobile program services. Channel sharing

arrangements between more than two stations could, however, limit the service options of individual broadcasters in such arrangements to some extent and, in particular, their ability to provide HD, multicast and mobile services simultaneously.

Mr. Chairman, my understanding is that the Plan recommends that the FCC "repack" the
broadcast television bands in an effort to free up additional spectrum. Would re-scanning of
TV's and converter boxes be necessary after repacking, would that create consumer confusion,
and would this effect future multicast and HD programming?

RESPONSE: Viewers in markets where local stations were re-packed to new channels or changed channels as part of a sharing arrangement would need to re-scan their digital television receivers and converter boxes. We also anticipate that there would be a period of time before re-packing of channels would take place. To avoid consumer confusion, information would be provided in advance advising viewers of the need to and the process to re-scan their receivers and the date on which the channel changes would take place. Re-packing by itself would have no impact on a station's ability to provide HD or any multicast/mobile services it may offer.

Mr. Chairman, as you know, Commissioner Clyburn has expressed concerns about the effect this
proposal would have on diversity in broadcasting and on local journalism. We also had a
hearing on the future of journalism earlier this Congress. Where is the FCC on their inquiry in
this arena?

RESPONSE: On January 21, 2010, the Commission issued a Public Notice announcing its examination of the Future of Media and Information and the Needs of Consumers. The objective of the review is to assess whether all Americans have access to vibrant, diverse sources of news and information that will enable them to enrich their lives and communities, as well as our democracy. The Public Notice set out a number of questions for which public comment was sought, and those comments were due on May 7, 2010. In addition to those submissions, project staff is reviewing existing studies, the records of other proceedings and other resources for pertinent data. Staff also is reaching out to industry, advocacy and public interest groups, academics and others to participate in the proceeding, through written filings or meetings. A Future of Media workshop on commercial media was held on March 4, and another, on public and other noncommercial media, on April 30. The project plans to issue a report by the end of the year which provides an assessment of the current media landscape, analysis policy options and, as appropriate, policy recommendations to the Commission, as well as other government entities and parties. The Inquiry will be conducted with great sensitivity to the First Amendment and the need to protect free speech and an independent press. Any recommendations will be crafted in furtherance of the longstanding public interest goals of the Commission's media policy, including diversity, localism and competition.

Small Business Broadband Service and Competition

In the National Broadband Plan, the FCC makes several recommendations regarding wholesale competition regulations for broadband services provided to small businesses. One proposal under

consideration by the FCC is a petition which seeks access to local fiber facilities in order to provide broadband services to small business customers. It is my understanding that the Small Business Administration Office of Advocacy supported that petition.

Are multiple broadband providers competing to serve small businesses now and what can you
do to encourage broadband service delivery and packaging for the unique needs of small
businesses?

RESPONSE: I'm certain that there is a great deal of variability among small businesses throughout America regarding the competitive choices each has available to serve its unique needs. With a proper regulatory framework and suitable data necessary to implement that framework, we can better ensure that small businesses have sufficient competitive alternatives to meet their evolving needs. In response to the Plan's recommendations, we are undertaking a review of existing policies and development of just such a competitive framework.

Network Neutrality

Mr. Chairman, though this debate today has broken largely along partisan lines, it should not. Neither network neutrality nor ensuring that our communications network is accessible to everyone are partisan issues. The Christian Coalition's Vice President of Communications, Michele Combs put it best in testimony before your Commission when she said that "We believe that organizations such as Christian Coalition should be able to continue to use the Internet to communicate with our members and with a worldwide audience without a phone or cable company snooping in on our communications and deciding whether to allow a particular communication to proceed, slow it down, block it, or offer to speed it up if the author pays extra to be on the 'fast lane.'" She went on to say, "Any threat to the ability of organizations and groups to reach the American public at very low cost without permission is simply unacceptable and strikes at the heart of an engaged citizenry and well functioning democracy in the 21st century."

 Mr. Chairman, in your review of the comments on an Open Internet and network neutrality, have you noticed a disconnect between what those who use the Internet like the Christian Coalition on one of the political spectrum and Daily Kos on the other or are users largely united on this question?

RESPONSE: Staff review of the comments in the Open Internet proceeding is ongoing; we received reply comments from tens of thousands of people and entities at the end of last month. Commenters from across the political spectrum have expressed support for the proposed open Internet principles, with a particular emphasis on the benefits of the principles for promoting free speech and innovation, and enabling new and/or traditionally marginalized voices to participate online.

Questions for the Record from Senator Byron Dorgan to FCC Chairman Julius Genachowski

Reforming intercarrier compensation and the Universal Service Fund is a difficult but critical undertaking. Transitioning from a regime that supports voice telephony to one that supports broadband is not an easy task. The National Broadband Plan suggests that the current size of the fund can be used to bring fast and affordable broadband to the nation.

How do you plan to make these changes without growing the current size of the fund?

RESPONSE: Universal service resources are finite and contributions have grown significantly over the last decade. The contribution factor is at its highest ever level at more than 15 percent. To keep the overall size of the universal service fund within baseline projections, the Commission will need to eliminate inefficient funding of legacy voice service and refocus universal service funding to directly support modern communications networks that will provide broadband as well as voice services.

The National Broadband Plan recommends a 10-year transition to ensure that service providers that rely on universal service to provide voice service to their communities can make the migration to broadband successfully. During this transition, the Plan recommends that the Commission establish a Connect America Fund to support broadband and a Mobility Fund to provide one-time support to consumers in states that significantly lag the national average for 3G service. During this same period, the Plan also recommends that the Commission reduce spending under the legacy high-cost support mechanisms and target the savings to the Connect America Fund and other recommendations in the National Broadband Plan. On April 21, 2010, the Commission adopted a notice of inquiry and notice of proposed rulemaking, which sought comment on: (1) moving rate-of-return companies to incentive regulation, (2) retargeting interstate access support to a new Connect America Fund, and (3) eliminating funding for competitive eligible telecommunications carriers over a five-year period. The Plan recommends that by the end of the transition, the Commission eliminate the legacy high-cost support mechanisms and all support will be provided through the Connect America Fund.

Today, according to one survey, North Dakota ranks 42^{nd} out of fifty states in broadband speed. Your goal for "100 Squared" – 100 million households with 100 megabits per second download speeds – by 2020 is laudable. Yet the plan also calls for a reformed universal service fund that supports broadband offerings at 4 Mbps.

- How can your universal service plan get us to "100 Squared"?
- How will you structure the policies to meet these goals in a way that doesn't exacerbate the existing digital divide?

RESPONSE: The National Broadband Plan sets forth a path for the United States to lead the world in the number of homes and people with access to affordable, world-class broadband connections. The Plan includes a goal of connecting 100 million U.S. homes with affordable access to actual download speeds of at least 100 Mbps and actual upload speeds of at least 50 Mbps by 2020. The Plan

recommends encouragement of private sector investment to realize this goal by, among other things, fostering competition, driving demand for increased network performance and lowering the cost of deploying infrastructure. These will help inform consumers about broadband performance, expand services and infrastructure, and reform access to rights-of-way to lower barriers to entry for firms.

At the same time, ensuring all people have access to broadband requires the Commission to set a national broadband availability target to guide public funding. An initial universalization target of 4 Mbps of actual download speed and 1 Mbps of actual upload speed, with an acceptable quality of service for interactive applications, would ensure universal access. The 4 Mbps is the median speed received by residential consumers today, and what many consumers are likely to use in the near term, given past growth rates. A universalization target of 4 Mbps download and 1 Mbps upload is aggressive. It is one of the highest universalization targets of any country in the world. Many nations, such as South Korea and Finland, have already adopted short-term download targets around 1 Mbps.

To ensure that consumers in rural areas receive broadband speeds reasonably comparable to urban areas, the Plan also recommends reevaluating this 4 Mbps funding target every four years and adjusting it as appropriate to reflect changing consumer use and demand. Doing so will ensure that there is no digital divide in this country.

Many of the goals laid out in the plan focus on mobility and the need for fast, extensive wireless networks. But I do not believe the plan addresses the issue of handset device exclusivity and its effect on competition. Chairman Genachowski, at a hearing in the Commerce Committee last June, you committed to reviewing the exclusive arrangements between wireless carriers and cell phone manufacturers.

 What is the current status is of the petition for rulemaking on handset device exclusivity filed in May of 2008?

RESPONSE: On May 20, 2008, the Rural Cellular Association filed a petition requesting that the Commission initiate a rulemaking proceeding examining "exclusivity arrangements between commercial wireless carriers and handset manufacturers." The Commission collected a record on the petition last year. In addition to assessing the record submitted, Commission staff are meeting with interested parties and are independently monitoring and evaluating the availability of handsets to consumers, and to smaller service providers, in the mobile wireless marketplace.

There are a number of departments and agencies that work on broadband issues. How will the FCC work with those partners to improve broadband access and availability in Indian country?

RESPONSE: The NBP includes a number of recommendations to improve coordination across Federal departments and agencies that work on broadband issues. In particular, Recommendation 9.14 urges the Executive Branch to establish a Federal–Tribal Broadband Initiative specifically for this purpose. Once this Initiative is established, the Commission will work closely with its Federal partners on the Initiative to improve broadband access and availability on Tribal lands.

We are already in the process of implementing other recommendations that will enable the Commission to more effectively coordinate with Federal partners. For example, we are creating an Office of Native American Affairs, which will work with other Federal departments and agencies to coordinate cross-agency efforts for helping Tribes. We expect to appoint a Director to this Office shortly. We are also in the process of establishing an FCC-Native Nations Broadband Task Force, which will include senior staff from all FCC Bureaus and Offices. This Task Force will ensure that Tribal concerns are considered in all broadband-related discussions and initiatives involving the Commission and other Federal departments and agencies.

The National Broadband Plan proposes establishing a Federal-Tribal Broadband Initiative, a FCC-Tribal Broadband Task Force and an Office of Tribal Affairs. How will these entities coordinate with tribes and with each other to assist tribes in improving broadband access?

RESPONSE: We envision that all three entities will coordinate with each other in a close and integrated manner. The Office of Native American Affairs will be led by a new Director, who will lead a staff focused exclusively on Native American issues. In addition to having dedicated staff support, the Director will also be able to leverage the full expertise and resources of the Commission through the FCC-Native Nations Broadband Task Force, which will be led by the Director and will include senior staff from all the Bureaus and Offices. Once the Federal-Tribal Broadband Initiative has been established, the Director and the Task Force will represent the Commission on the Initiative.

With respect to coordinating with Tribes, the Office of Native American Affairs will engage in regular and meaningful communication with Tribal governments, organize outreach activities and events, and serve as a resource and partner to Tribal governments. In addition, both the FCC-Native Nations Task Force and the Federal-Tribal Broadband Initiative will include elected or appointed leaders of Tribal governments, which will enable and facilitate direct coordination with Tribes. The Task Force will also develop a formal FCC consultation policy for consulting with Tribal governments.

The lack of data is a consistent problem for most Indian issues, and broadband is no exception. I applaud your recommendations aimed at better broadband data collection on tribal lands. How can this data assist the FCC and others in increasing access to broadband for tribes?

RESPONSE: The lack of data regarding broadband deployment and adoption on Tribal lands renders it difficult to understand the true scope of the challenge, formulate intelligent policy, and address specific needs across Tribal communities. For example, we do not have a clear understanding of the amount of additional funding that would be needed to deploy broadband infrastructure to all Tribal lands. The lack of data also complicates efforts to measure the efficacy of adoption efforts and initiatives. With better data, we could begin the process of identifying needs, developing tailored approaches, and working with Tribes to implement real solutions.

Questions for the Record from Senator Maria Cantwell to FCC Chairman Julius Genachowski

Almost eight and one half years after 9/11, an interoperable communications system for our first responders remains a goal rather than a reality. There are some actions the FCC can take in the immediate term to improve public safety communications. Pending at the FCC are waiver requests from several cities that want to start immediate construction of an interoperable public safety network. Seattle is one of the cities. Seattle is proposing to use spectrum already in the hands of the Public Safety Spectrum Trust in a manner that will be consistent and compliant with the Commission's broader public safety policies and standards.

Public safety organizations in neighboring communities in Pierce County want to expand Seattle's proposed interoperable network southward once it is up and running. Last year, there were five police officers murdered in Pierce County. In one incident, law enforcement officials told me that its lack of interoperable communications across jurisdictions slowed down their manhunt to track down the perpetrator.

• Do you believe the Seattle waiver request is consistent with the public safety objectives of the national broadband plan?

RESPONSE: We recently released an order granting conditional waivers to twenty-one petitioners, including Seattle. This order will enable Seattle and the other waiver recipients to move forward with their broadband deployment plans while preserving the Commission's long-term goals for nationwide interoperability.

• The Commission's proposed broadband plan agenda indicates it will act these on petitions no later than in the third quarter this year. Can you assure me that the Commission will keep to this schedule?

RESPONSE: We have already released an order acting on these petitions.

The D-block auction during Chairman Martin's watch was a complete failure. The National Broadband Plan recommends licensing the D block for commercial use, with options for public safety partnerships. That is a change from the earlier plan for the D block auction winner to build out a joint network for public safety and commercial use.

There are some who argue that the spectrum should be given directly to local public safety. Most emergencies tend to be either local or regional in nature. Under this scenario, the local government would negotiate with a local carrier to operate the network.

Why do you believe the approach described in the National Broadband Plan will be more successful
than providing the spectrum directly to public safety in cities and regions and allowing them to
negotiate with local telecommunications providers?

RESPONSE: The public safety broadband spectrum is licensed to the Public Safety Spectrum Trust (PSST), which includes on its board representation from a number of national public safety organizations. With regard to the commercial D Block adjacent to the public safety broadband spectrum, the Commission must auction the D Block for commercial use in order to comply with current law. Notwithstanding the legal requirement to auction the D Block, our analysis indicates that mere reallocation of the D Block to public safety would not ensure deployment of a nationwide, interoperable public safety broadband wireless network that is reliable and resilient. The National Broadband Plan's approach, on the other hand, will achieve this goal by providing public safety users with 10 megahertz of dedicated spectrum, priority access to 700 MHz commercial spectrum when they need it (providing significantly more capacity), and the ability to leverage commercial deployments—including in the D Block—to reduce their overall costs significantly. Making the D Block available for commercial use will also ensure there is a market for consumer-priced "off the shelf" devices that will greatly reduce device costs for public safety, in contrast to the current situation where specialized public safety devices often cost thousands of dollars per unit. One essential ingredient to a nationwide, interoperable network, also recommended by the Plan, is public funding to bring public safety's chosen partners up to public safety standards and to extend the network into rural areas. Reallocation of the D Block alone will not ensure a nationwide network. Funding is necessary in this regard and the National Broadband Plan's recommendations were based on a detailed cost model. The ability for the National Broadband Plan's recommendations to create a nationwide, interoperable public safety broadband network is a key is reason that the former Chair, Vice Chair and two members of the 9/11 Commission called the FCC's plan "a realistic framework to move forward."

• Is getting the Emergency Response Interoperability Center up and running a gating function for building out the public safety network? How do you ensure that NIST and DHS will participate fully in ERIC? Will that require legislation?

RESPONSE: The Commission recently released an order establishing ERIC, which is now in the initial staffing phase. The Commission is in the process of negotiating Memoranda of Understanding (MOUs) with both NIST and DHS, which should obviate the need for legislation to ensure their participation. We have already been engaged in close coordination with these federal partners, and my staff and I look forward to working with our federal partners to make ERIC a success.

• What happens to implementation of the public safety recommendations of the National Broadband Plan if Congress cannot appropriate \$6.5 billion over the next 10-years for a new grant program to help construct the network?

RESPONSE: The bottom line is that, without significant public funding, the public safety broadband network will be neither nationwide nor fully interoperable. Reliance on commercial partnerships alone, or on the reallocation of the D Block to public safety, cannot guarantee deployment in remote areas or ensure that public safety broadband facilities are built to required standards for hardening, reliability and redundancy. The public funding program is therefore a crucial component of the Plan's strategy for creating the network.

 Do you believe the Commission currently has authority under the universal service provisions of the Telecommunications Act of 1934 (as amended) to have telecommunications providers add a small service charge to customers' bills to help towards the funding of the public safety network's operations?

RESPONSE: The Plan recommends that Congress consider enacting legislation to create a funding program to support capital and operational expenses for the public safety broadband network. I believe that Congressional action is the best means of assuring that the Commission has a clear source of authority to put this mechanism into place. The public safety broadband network will thrive only if a sustainable and adequate public funding mechanism is established to support the operation, maintenance and continual evolution of the network.

My understanding is that under the National Broadband Plan, the over-the-air television broadcasters in certain markets will be provided with incentives to return some spectrum and have their channels moved closer together. I imagine the Commission would want to pack the over the air broadcast channels in as close together as the interference protection rules allow.

• If this is the case, would the relocation of over-the-air broadcaster's channels into a narrow band lead to a dramatic reduction in the amount of spectrum available for white space in most communities?

RESPONSE: The Commission is currently developing plans for beginning to implement the National Broadband Plan's recommendation for recovery of a portion of the spectrum currently used by overthe-air television stations. In implementing that plan, there is potential for impact on the amount of white space, (locally vacant, TV spectrum) that is available for use by unlicensed white space devices. The extent of such impact and how it would affect the amount of white space spectrum available in different communities would depend on how the spectrum recovery is implemented. The National Broadband Plan also recommends that the Commission provide additional spectrum for unlicensed devices on a nationwide basis; such additional spectrum could offset any potential unlicensed spectrum that might be reduced through changes in allocation and use the extant broadcast television spectrum.

The broadband plan urges the FCC to complete the necessary actions to implement the use of fixed wireless and portable personal devices in the broadcast white space.

• If Congress were to make the statutory changes to implement the spectrum proposal in the plan, how might it impact the current rules regarding the use of the broadcast white spaces?

RESPONSE: The requested statutory changes would facilitate the transfer of spectrum from the over-the-air television service to wireless broadband uses. This change could reduce the amount of TV white space that is available at individual locations and such a reduction could affect certain aspects of the TV white space rules, including those governing the spectrum used by fixed versus personal/portable devices and perhaps other portions of the rules depending on how the spectrum recovery is implemented. Accordingly, the Commission may need to review its TV white space rules in light of any changes it makes in the spectrum that is available for over-the-air television once those changes are complete.

The FCC issued its final order in the broadcast television white spaces proceeding in November of 2008. A number of parties have asked the FCC to reconsider its order. Additionally, there are other open issues at the Commission that impact the use of the white spaces such as the database proceeding and the 700 MHz proceeding including questions around wireless microphones operating illegally in the band. The FCC order has been appealed to the courts and the court case has been held in abeyance until the FCC completes its reconsideration proceeding. I am pleased to see that your Broadband Agenda has indicated that you plan to issue a white spaces Opinion and Order in the third guarter of this year.

• Will you decide all open white spaces issues: the reconsideration, the database order and the 700 MHz issues no later than the third quarter of this year?

RESPONSE: As you indicate, there are several matters outstanding that affect TV white spaces, including petitions for reconsideration, selection of one or more database administrators and a decision on final rules for wireless microphones. We intend to complete our action on the petitions for reconsideration and wireless microphones in the third quarter of this year. We also expect that we would complete our decision on the database manager(s) in the same time frame or shortly thereafter.

I've been a strong advocate for technology neutrality – be it in healthcare IT, smart grid, or cybersecurity. My belief is that if we establish a neutral playing field it will allow many options to emerge. Consumers and businesses will benefit from a diversity of choices. I believe it is important to clearly describe the desired objectives of the National Broadband Plan and ensure that all segments of industry can compete in a technology neutral manner to meet the prescribed goals. It is important that policymakers refrain from adopting policies that pick winners and losers. The discussion around education software was largely focused on touting the benefits of a particular software business model—open source (p. 231).

I have nothing against this particular business model, but it is critical that the government not prescribe which technology or software development business model should be adopted---either when it is a market actor or when it is making policy.

• Do you believe that technology neutrality is important and will this principal guide your communications policy decisions in implementing the National Broadband Plan?

RESPONSE: I agree that the Commission should always strive where possible to avoid placing its thumb on the scales to favor one technology choice over another. The National Broadband Plan is based on this same philosophy and specifically supports "regulatory frameworks that are procompetitive, transparent and technology-neutral."

The use of advanced metering will contribute to our nation's energy efficiency and conservation efforts. There is some concern, though, that information obtained from advanced metering will allow utilities and third parties to infer patterns from the data they collect of what goes on in a household over the course of a day. This stream of information may become another source of revenue for utilities and allow them to evolve their business model.

There is a question of consumer privacy. The Telecom Act of 1996 created Section 222 of the Communications Act on how telecom companies need to treat the privacy of Consumer Proprietary Network Information.

Do you believe there should be an analogous statute created for the smart grid?

RESPONSE: The National Broadband Plan (NBP) recommends that consumers be able to access and control their own digital energy information. Privacy and security are critical to the success of the Smart Grid; the NBP stresses that "security and privacy should be fundamental to both network architectures and everyday business processes."

The NBP recommends that states update their energy data policies, to include privacy and data accessibility rules for the Smart Grid. However, the NBP also recommends that "if states fail to develop reasonable policies over the next 18 months, Congress should consider national legislation to cover consumer privacy and the accessibility of energy data."

Consumer Proprietary Network Information (CPNI) rules are principally about privacy and the protection of customer information in telecom. There are separate rules, such as Truth-In-Billing, that address the customer's rights to access his or her own data. Other industries, like health care, have integrated protection <u>and</u> accessibility rules. HIPAA, as an example, sets forth national rules to protect personal information, to ensure patients can get timely access to their own information, and to allow authorized third parties access to patient data. If Congress is going to consider national smart grid legislation about energy data, it would be worth considering including provisions for both the protection <u>and</u> accessibility of the data.

• Do you believe utilities should allow consumers to provide an affirmative consent before it can disclose smart meter information to third parties?

RESPONSE: Generally yes, but with exceptions. With safeguards, electric utilities should be able to conduct certain regulated activities, such as energy efficiency programs, without requiring individual affirmative consent for data disclosure. Imagine, for example, a third-party vendor that helps a utility with its energy efficiency programs. Today, this vendor already has to comply with the utility's existing data protection rules – i.e. a consumer's monthly energy usage data can only be used to help the utility offer energy efficiency products/services back to the customer. Requiring utilities to now get individual affirmative consent would have the unintended consequence of lowering the response rate to the utility's energy efficiency programs.

There are a few other limited scenarios where, with the proper safeguards (e.g. anonymization of personal information), utilities should be able to disclose a subset of information gathered from smart meters without affirmative consent. The NBP offers examples:

"With reasonable privacy protections, the federal government should be granted limited access to utility bills from homes receiving federal energy efficiency funds to better evaluate the government's energy efficiency programs, such as weatherization. Energy consumption data, when aggregated, can be very useful to a wide variety of public policy and economics researchers. States should consider how third parties might get access to anonymized datasets for research purposes, with strict privacy protections."

For most other scenarios, however, utilities <u>should</u> require affirmative consent before disclosing smart meter information to third parties.

The broadband plan says the amount of data moving across the Smart Grid networks is modest today but is expected to grow significantly over time. No one seems to have a good handle at the moment on the Smart Grid's future bandwidth needs. The plan makes four recommendations related to addressing the future spectrum needs for the Smart Grid.

• How do you see the spectrum needs for the Smart Grid evolving? Will it be a combination of commercial wireless spectrum for less secure communications and dedicated spectrum for mission critical communications?

RESPONSE: There are over 3,000 utilities in the U.S. that serve customers across very different topologies and regulatory regimes. There is not a single solution or a "representative" network for

the Smart Grid. Many utilities use a mix of commercial and private networks in the Smart Grid, and will continue to do so.

Although, generally speaking, electric utilities traditionally prefer to build and maintain private networks for mission critical communications, some utilities <u>do</u> use commercial networks for mission critical communications today. Commercial networks can be made secure and resilient, as demonstrated by their use in the federal government (DoD, DHS, etc.). For some smaller utilities, the lack of internal networking expertise and personnel might have driven the decision to use commercial facilities.

Utilities will need greater communications across the grid, and many are increasingly using wireless technologies, which are often more cost-effective that wired facilities in reaching wide areas or distributed assets. These wireless networks including licensed commercial networks, licensed private networks, and private networks operating at power levels where FCC licenses are not required.

Dedicating spectrum for the Smart Grid would have benefits and disadvantages. Potential benefits include: 1) providing another mechanism for the federal government to drive national interoperability standards and best practices of cyber-security, privacy, and consumer data access, 2) vendor standardization and competition, which could lead to lower equipment prices or more functionality, and 3) a possible acceleration of smart grid deployments. Risks/disadvantages to dedicating spectrum include: 1) possible sub-optimal use of spectrum, 2) fewer applications and users on commercial networks to drive down the cost for all users, 3) the opportunity cost to the U.S. Treasury of not auctioning off the spectrum to commercial broadband users, and 4) a near-term effect of "freezing the market" while companies re-evaluate their Smart Grid technology road maps.

Developing a Smart Grid is national policy set forth by EISA 2007, and the NBP recommends that the federal government continue to explore the issue of providing spectrum, recommending that "NTIA and the FCC should specifically explore possibilities for coordination of Smart Grid use in appropriate federal bands. Any new broadband network built in the identified spectrum should be required to meet standards of interoperability, customer data accessibility, privacy and security. Use of this spectrum should not be mandated, so that legacy systems are not stranded and that commercial, other shared networks and unlicensed wireless networks can be used where appropriate."

It's important to note that there are a variety of possible models that could be employed to provide spectrum to the industry, including a sharing of spectrum with federal users, sharing with public safety networks (also recommended in the NBP), dedicating spectrum with specific build-out requirements, and auctioning spectrum for critical infrastructure uses (which includes the Smart Grid, but could also include natural gas and water management, among other). Market-based auctions pose some challenges for utilities, since approximately 30% of the power is delivered to customers through non-profit entities (co-operatives and municipals), and even among the investor-owned

utilities, some have business model or service territory incompatibilities to participating in spectrum auctions.

In January, NIST released its Framework and Roadmap for Smart Grid Interoperability. There was a short section that touched on models for smart grid information networks. It also discussed technologies for standards for smart grid communications infrastructure.

There was nothing in the broadband plan on communications standards issues related to the Smart Grid. For example, one of the debates is whether the entire Smart Grid should be IP – based.

• Do you believe the Smart Grid should be IP-based end-to-end?

RESPONSE: The NBP is technology-neutral and does not recommend one networking protocol over another for the Smart Grid. However, the NBP does stress the importance of open standards and uses the success of Internet Protocol (IP) standard as an example. The NBP notes that: "the NIST standards development process should continue to draw on lessons from the Internet. Open standards are critically important—Internet Protocol being a prime example."

NIST has a Priority Action Plan (PAP) focused on the role of Internet Protocol (IP) in the Smart Grid. This is the proper forum for the architectural debates about how fast and how much IP can be incorporated into the Smart Grid. It is important to remember that the Smart Grid includes a wide variety of legacy utility communications systems, some of which are incompatible with IP networks.

• Is there a reason where there was no recommendations relating to Smart Grid communications standards in the broadband plan?

RESPONSE: Establishing and maintaining national Smart Grid standards is critical to the success of the Smart Grid (and is national policy under EISA 2007). The NBP did not offer specific recommendations to improve or change the NIST Smart Grid standards coordination process, but did stress the importance of the process and of Smart Grid standards. The NBP states:

"Standards are critical to the Smart Grid. For example, the faster NIST can accelerate market convergence toward a small number of appliance communications standards, the sooner manufacturers can offer smart appliances that communicate with the rest of the smart home. Standards will help ensure that the Smart Grid is "plug-and-play," encouraging innovation by giving companies a large potential market for devices and applications and providing customers with the ability to use any of them to take advantage of the grid."

Questions for the Record from Senator Frank Lautenberg to FCC Chairman Julius Genachowski

While we work to bring new communications services to more Americans, New Jerseyans still lack basic TV coverage of local news and events.

WWOR, New Jersey's only high-power commercial TV station, has not adequately served the people of New Jersey and is operating under a license that expired almost three years ago.

 When will the FCC be in a position to act on WWOR's renewal application and concerns about its local news coverage?

RESPONSE: As you know, a petition to deny the license renewal application of WWOR has been filed with the Commission. The petition raises important issues about both the quantity and quality of New Jersey specific news provided by WWOR. The petitioner recently submitted additional information which currently is under review in the Media Bureau. I hope this matter can be concluded expeditiously.

Questions for the Record from Senator Mark Pryor to FCC Chairman Julius Genachowski

I support the goals of the FCC's recommendations regarding set-top boxes but I understand that the FCC's proposal would unintentionally change the competitive landscape by favoring cable over satellite due to differences in system architecture. I am worried that the FCC's television set-top box proposal will have a disproportionately negative impact on rural residents who rely on satellite delivered television.

• Do you plan on examining that situation further to ensure there are no unintended consequences of harming the consumer?

RESPONSE: Yes, I agree that the Commission should consider differences in system architecture to ensure that consumers are not disadvantaged. To prevent any unintended consequences, the "Allvid" Notice of Inquiry recently adopted by the Commission includes particular questions to assure that the Commission's eventual course of action does not unfairly burden any subscription video provider. Specifically, the Notice of Inquiry seeks comment on network-specific functions that the Commission would need to consider as we develop our proposal. In addition, the Notice invites commenters to propose alternate methods that would help to achieve retail availability of smart video devices that can access subscription video services. The Commission will consider these comments carefully, and I am confident that this proceeding will conclude with a solution that benefits all subscription video providers, device manufacturers, and consumers.

One of the recommendations in the National Broadband Plan is that the federal government should launch a National Digital Literacy Program that creates a Digital Literacy Corps, increase the capacity of digital literacy partners and create an Online Digital Literacy Portal. The plan cites the statistic that 22% of non-adopters claim a digital literacy-related factor as their main barrier. The rate of broadband adoption is low in my state.

• In addition to the recommendations in the National Broadband Plan, would incentivizing businesses to offer digital literacy programs in low-income areas be an effective mechanism to increase the adoption rate of broadband?

RESPONSE: Digital literacy training can promote broadband adoption and help individuals and businesses gain the skills they need to compete in the 21st century economy. Private sector businesses play an important role in digital literacy in several ways. Businesses provide training to their own employees and support local and community efforts by creating digital literacy content and training materials, supporting employee volunteers who provide digital skills training to local community members or small businesses and providing financial assistance to non-profit groups who provide digital literacy training. These efforts can be particular effective when they include trusted

members of the community providing training to non-adopters in comfortable settings and should be encouraged.

The plan recommended that all community colleges should be connected with high-speed broadband. A recent report from the Brookings Institution report states that, "Community Colleges present enormous opportunities for meeting national and economic goals." My state is home to 23 community colleges and I couldn't agree more that these institutions should have improved connectivity and access to greater technological resources as community anchor institutions.

• The Federal Communications Commission has indicated that it would require around \$350 million to fund broadband connections for community colleges. In your view, would a grant program be an effective mechanism to reach the goal of community college connectivity?

RESPONSE: As you note, the National Broadband Plan recognized the important role that community colleges play in preparing students for their place in the 21st century workforce. As the Plan explained, Congress should evaluate the amount of funding necessary to connect all public community colleges with high-speed broadband after the awarding of funding through the Broadband Technology Opportunities Program. There may be many ways, including grant programs, to successfully allocate and distribute additional funding that can achieve the goal of improving availability of high-speed broadband at Community Colleges.

Questions for the Record from Senator Claire McCaskill to FCC Chairman Julius Genachowski

The National Broadband Plan proposes to use 2345-2360 MHz spectrum for the expansion of broadband wireless communications. That spectrum is adjacent to a band that aerospace companies use radio spectrum in the 2.3 GHz band for flight test telemetry.

Has the FCC reviewed how test flights will be affected by this change? Can you provide any
assurance that broadband wireless in the adjacent band to will not cause interference to flight
test telemetry?

RESPONSE: FCC staff issued a public notice on April 2, 2010, inviting comment on the specific draft rules, including both the technical standards and interference resolution mechanisms to protect adjacent band services. The FCC staff has thoroughly analyzed the record, met numerous times with commercial Aeronautical Mobile Telemetry (AMT) stakeholders, and with the National Telecommunication and Information Administration (NTIA) which represents federal AMT stakeholders. I am committed to working with our counterparts at NTIA to find a solution that adequately protects AMT operations.

The biggest benefit that I see for broadband is the economic development and job growth that it can bring. Wiring towns and building infrastructure is paramount to encourage growth in communities and is an investment that will pay off in the future. It will also make up more competitive with the rest of the world.

The Plan talks a lot about public-private partnerships to encourage economic development and job growth. That sounds great and I like the concept in theory—private companies have invested \$60 billion in broadband and have created hundreds of thousands of jobs, including tens of thousands in Missouri. It is clear that we can't have real growth without private investment buying into the Plan.

• But how do you envision this working? What sort of incentive do private companies have to enter into arrangements like this? Have you gotten interest from private companies? And are you concerned about overlap with existing programs and companies?

RESPONSE: Private sector cooperation and investment are important for America to achieve continued growth and innovation. The importance of the private sector is one reason why the Plan emphasizes the benefits of creating public-private partnerships, particularly in the section dealing with economic opportunity. To date, the private sector has shown a willingness to collaborate with the Commission and other public institutions in these initiatives. Specifically, the Small Business Association (SBA) and its volunteer resource partner, SCORE, recently announced a partnership with 10 leading technology firms to provide digital literacy tools to small businesses across the country, as recommended in the Broadband Plan. The goal of this partnership is to leverage existing infrastructure and programs SBA and SCORE have in place, as well as leveraging existing expertise and resources that the private sector firms have in place. In this way, the Commission can seek to bring

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more resources to a broader array of companies and communities, while not duplicating past efforts or wasting resources. Moreover, the private sector firms stand to gain exposure for their products, a reputation for dedicated involvement in local communities, and a broad array of potential new customers as more businesses take advantage of broadband and its associated tools and applications.

Questions for the Record from Senator Amy Klobuchar to FCC Chairman Julius Genachowski

One of the most discussed aspects of the plan is the transition of spectrum from broadcast television to wireless broadband. Many of my constituents, especially those in rural areas, are worried that they may lose access to over-the-air television signals.

• If the broadband plan recommendations go through, what will this mean for consumers' ability to access broadcast television?

RESPONSE: If the broadband plan's recommendations for the broadcast TV spectrum are implemented, consumers will continue to access broadcast television using the same receivers and antennas that they are currently using. In some cases, depending on how a market is repacked, viewers might need to obtain new antennas in cases where local stations would 1) re-locate to a new transmitter at a site farther away or 2) move to low VHF channels (channels 2-6) and a viewer's antenna does not already include a capability for effective reception of low VHF signals.

Broadcasters will have the option of choosing how to best serve their viewers, including strengthening their financial basis by reducing the amount of spectrum they are using while continuing to provide their own unique programming content over the air by sharing a channel with another station. Channel sharing by two or more stations would not require consumers to use additional equipment; the multiple stations would be received as multicast streams with existing receivers. Viewers would, of course, need to re-scan their digital television receivers and converter boxes to be able to view stations on their new channels after the channel re-packing was completed. We anticipate that various analyses will need to be performed and considered through rule making. However, it is reasonable to anticipate that few, if any, changes in the TV allotments will be needed in most rural areas.

• While it is clear that wireless broadband needs additional capacity, how can we be sure that broadcast television remains viable?

RESPONSE: Participation in the channel sharing program would be voluntary, as would any decision by a station to vacate its channel pursuant to an incentive auction. In addition, we will make sure that there are sufficient spectrum resources for broadcast stations to continue to operate in a viable manner. We also intend to work with the broadcast television industry throughout the spectrum recovery process and to address their concerns in the various actions that we will take.

Several billion dollars was recently spent on the converter box program to ensure that no viewers were disenfranchised as a result of the digital transition.

Will they still be able to access over-the-air television and get a strong signal?

RESPONSE: The digital television converter boxes would continue to function to provide service from over-the-air signals after the broadcast TV spectrum is re-packed. The available television stations may be on different channels in some cases, but this could be handled through rescanning of the existing converter boxes (or TV receivers) and consumer education. Signal strengths would only be affected in cases where a broadcast station relocated its transmitter and/or combined to share a channel with another station whose service area was different from its own; such cases could result in an increase or a decrease in service area, or a change in service area with little to no net change in coverage area. Any potential impact on consumer reception of TV signals will need to be considered carefully through rule making and minimized to the extent possible.

• Will they have to purchase new equipment or antennas?

RESPONSE: Consumers will generally not need to purchase any new equipment to continue to receive television signals off-the-air if stations are re-packed to new channels. As indicated above, a new antenna might be needed if a station in a viewer's market were to relocate to a channel in the low-VHF range (channels 2-6) and the viewer's antenna did not already include the capability for effective reception of those channels.

Questions for the Record from Senator Tom Udall to FCC Chairman Julius Genachowski

Indian Country and Tribal Broadband Recommendations

Mr. Genachowski, I am pleased that the National Broadband Plan includes recommendations for tackling the digital divide facing our nation's Tribal lands, where less than ten percent of residents have access to broadband.

I know you understand the severity of this problem, and I want to thank you for your leadership in addressing this challenge. I strongly support the Broadband Plan's recommendation to establish an Office of Tribal Government Affairs at the FCC to improve cooperation and coordination with Tribal leaders on a government to government basis. I also support efforts to transition the Universal Service Fund for telephone to a "Connect America Fund" for broadband.

However, when transitioning to a Connect America Fund, how will the Commission ensure that
this reform effort addresses the unique connectivity needs of Indian Country, where the current
Universal Service Fund has not yet achieved universal telephone service?

RESPONSE: The National Broadband Plan contains several recommendations to address the disparity existing in Indian Country. It gives us a roadmap for increasing broadband deployment and adoption in unserved or underserved areas, including isolated Tribal lands. The availability of broadband service also means the availability of quality telephone service in these areas.

The Commission has taken the first critical step by beginning the process of converting the universal service fund over time to support broadband, which will free up more resources to build modern communications networks including on tribal lands. On April 21, 2010, the Commission adopted a notice of inquiry and notice of proposed rulemaking to examine near and longer-term processes to target funding toward new deployment of broadband networks in unserved areas while considering final rules to implement a new Connect America Fund that will efficiently provide universal service support for broadband and voice services. The Commission looks forward to receiving substantial input for this record from tribal governments, so Commission staff can understand and account for unique circumstances present on tribal lands.

Also within the second quarter of this year, the Commission intends to launch the new Office of Native American Affairs and the Native Nations Broadband Task Force. These initiatives should allow more efficient government-to-government relations with tribal governments, and the means to address more effectively the full range of Native American issues. The National Broadband Plan also recommends creating a tribal seat on both the Federal-State Joint Board on Universal Service and on the Universal Service Administrative Company board of directors, and the creation of a Federal-Tribal Broadband Initiative consisting of tribal leaders and officials from across all federal agencies. I strongly support all of these initiatives, and will work hard to put them in place to enhance government-to-government interaction with tribal bodies.

The remote nature of some tribal lands has prevented the residents of those areas from gaining even basic telecommunications services. The Commission needs better data on these regions, so it plans to issue a broadband data rulemaking proceeding toward the end of this year, and coordinate with Native American governments to enhance data collection on tribal lands. The Commission also intends to issue a spectrum on tribal lands rulemaking proceeding during the fourth quarter of this year to examine increasing mobile opportunities in Native American communities, and follow with a rural health care reform rulemaking proceeding with an eye toward bringing access to world-class healthcare for tribal and remote regions.

Throughout the Commission's activities implementing the National Broadband Plan, I intend to keep a watchful eye on how our actions benefit the most remote and unserved regions. I look forward to expanded and enhanced coordination with tribal governments, and full participation from tribal representatives and stakeholders in this major effort, so we can be assured of addressing the disparity in communications services that has existed on many tribal lands.

• What resources or funding would the proposed "Tribal Broadband Fund" need to meet the goal of universal broadband service on our nation's Tribal lands?

RESPONSE: Given the paucity of data regarding broadband deployment and adoption on Tribal lands, we do not yet have a clear sense of the required funding levels for the Tribal Broadband Fund. Submissions from NCAI and other Tribal entities recommend establishing the Tribal Broadband Fund on the level of \$310 million. However, the full cost of deploying broadband service to all Tribal lands has been estimated to range anywhere between \$1.2 billion to \$4.6 billion. The Commission will work with other Federal departments and agencies to improve data-collection on Tribal lands so that we can develop an accurate assessment regarding the funding needs of Indian Country.

Smart Grid Deployment

The National Broadband Plan recommends that the Rural Utility Service (RUS) make a priority of issuing Smart Grid loans to rural electric cooperatives. These rural cooperatives operate 42 percent of our nation's distribution infrastructure. The RUS has its roots in President Franklin Roosevelt's rural electrification program of the 1940s. Given that the agency today already supports electric and broadband service in rural America, having RUS support Smart Grid deployment makes sense to me.

 Could you expand on the National Broadband Plan's brief recommendation number 12.10 regarding RUS loans for Smart Grid?

RESPONSE: As a major lender to rural electric cooperatives, the Rural Utility Service (RUS) has an opportunity to bring the benefits of the Smart Grid to rural America. By some statistics, rural electric cooperatives are ahead in selected Smart Grid applications. Smart Meters are an example; it became cost effective to automate meter reading sooner in rural communities, where long distances made it more difficult or costly to read meters. Advanced metering penetration within rural electric cooperatives has grown quickly, having increased from 3.8 percent in 2006 to 16.4 percent in 2008. In other areas, however, rural electric cooperatives reportedly lag in their adoption of Smart Grid

applications compared to larger investor-owned utilities. In this respect, RUS has an opportunity to help rural America catch up.

In FY 2009, RUS disbursed 209 electric loans and loan guarantees totaling \$6.6 billion; the total RUS electric loan portfolio was over \$40 billion. Although the RUS has not provided the NBP exact numbers, the majority of these loans were for traditional grid improvements, not Smart Grid. RUS has the opportunity to fund more deployments of Smart Grid, and to encourage adoption of best practices in cyber-security, privacy, and data accessibility.

In a few cases, electric cooperatives are building broadband networks to offer retail broadband services in addition to serving as a smart grid network. The NBP encourages RUS to continue to fund these innovative projects.

Competition in Broadband Markets

The National Broadband Plan makes clear the importance of competition in broadband markets. The Plan highlights how wireless broadband providers may emerge as important competitors to wireline and cable broadband providers. However, some of the largest providers of DSL and fiber to the home broadband also have a major presence in the mobile broadband market.

• How will the FCC help ensure that consumers benefit from robust competition in broadband markets that lowers prices and encourages investment in new technologies?

RESPONSE: The National Broadband Plan recognizes that the Commission will have to pay particular attention to its competition policies. For instance, the Plan recommended and the Commission recently embarked on policy changes regarding mobile roaming, to allow smaller competitors the ability to compete by roaming on larger carriers' networks in some instances. Similarly, the Commission plans to review its wholesale competition policies to ensure that investment incentives are balanced against the need to ensure competition for broadband services.

 How will rural Americans benefit from lower broadband prices and better service if where they live is served by just one provider?

RESPONSE: While some areas may not see as much competition as others, many of the proposals we have advanced would lower the costs for new entrants to deploy networks further into rural America. Additionally, the Commission has proposed changes to the way in which the universal service program will disburse support for broadband networks in rural and high-cost areas of the country. Such changes would include speed and service quality standards.

 How will the FCC increase transparency in broadband markets for consumers with respect to data on availability and price of broadband service, as briefly discussed in the Plan's recommendation 4.2? RESPONSE: The Plan sets forth recommendations to increase transparency in the retail broadband market. Doing so should encourage broadband service providers to deliver better value to consumers through better services.

In particular, the Plan includes four recommendations to increase transparency:

- The Commission should, in coordination with the National Institute of Standards and Technology (NIST), establish technical broadband measurement standards and methodology and a process for updating them. The FCC should also encourage the formation of a partnership of industry and consumer groups to provide input on these standards and this methodology.
- The Commission should continue its efforts to measure and publish data on actual performance of fixed broadband services, and should publish a formal report and make the data available online.
- The Commission should issue a Notice of Proposed Rulemaking to determine appropriate
 disclosure obligations for broadband service providers, including disclosure obligations related
 to service performance. These obligations should include simple and clear data that a
 "reasonable consumer" can understand, while providing more detailed disclosure for more
 interested parties such as tech-savvy consumers, software developers and entrepreneurs
 designing products for the network.
- The Commission should develop broadband performance standards for mobile services, multiunit buildings and small business users.

The Commission has already begun implementing these recommendations and has launched "The Consumer Broadband Test" (currently in beta) to enable consumers receives real-time information about the quality of their broadband connections. Additional information on the Consumer Broadband Test, including the ability for consumers to test their broadband speed, is available at http://www.broadband.gov/qualitytest/about/.

Moreover, the Commission's Broadband Action Agenda indicates that the Commission will consider a Notice of Proposed Rulemaking to implement the Plan's transparency and disclosure recommendations in the third or fourth quarter of 2010.

Wireless Data Roaming

Rural wireless providers in my state tell me that customers cannot always use their smart phone's mobile broadband features when roaming outside their home provider's coverage area. This is due to the difficulty of companies always coming to an agreement on reciprocal data roaming arrangements.

How will the FCC address data roaming issues—discussed in the Plan's recommendation number
 4.11—so that these rural wireless companies can fully serve their customers, who often live in remote areas?

RESPONSE: In April, the FCC sought additional comment on whether to extend automatic roaming obligations to mobile data services. Comments are due June 14, 2010, and reply comments are due July 12, 2010. I look forward to reviewing the record and working with my fellow Commissioners to

determine, in an expeditious manner, the path forward that best serves American consumers with a focus on the importance of data roaming for rural Americans.

Set Top Boxes

The National Broadband Plan highlights how set top boxes can become more effective gateways to the Internet, especially for those who may have cable or satellite television but no computer at home.

However, I have heard some concerns from satellite television providers that the set top box technology they use is not as suitable as similar cable devices for becoming a new, standardized gateway to the Internet. This is potentially more important for rural Americans who live in areas served only by satellite TV.

• How will the FCC address this concern when moving forward with efforts to "open up" TV set top boxes as a way to promote Internet access for more Americans?

RESPONSE: I understand your concerns and the Notice of Inquiry recently adopted by the Commission regarding devices used by consumers to select and enjoy video programming is designed to ensure that our actions serve all Americans who subscribe to television services. The Commission's goal is to enable a cable subscriber in Albuquerque to move to Pie Town (or any other area of New Mexico) and subscribe to satellite service using the same smart video device. Specific questions are included in the Notice of Inquiry to assure that the Commission's course of action does not unfairly burden any subscription video provider based on its delivery method and system architecture. In particular, the Notice of Inquiry seeks comment on network-specific functions that the Commission would need to consider as we develop our proposal. The Notice also invites commenters to propose alternate methods that would help us achieve retail availability of smart video devices that can access subscription video services. The Commission will consider these comments carefully, and I am confident that this proceeding will conclude with a solution that benefits all subscription video providers, device manufacturers, and consumers.

Spectrum and Potential Interference Issues

Chairman Genachowski, everyone seems to agree that spectrum is a scarce and valuable resource that we must use wisely to allow consumers to benefit from current and new technologies, meet the needs of public safety agencies, and preserve our national defense capabilities.

• In the FCC's efforts to promote more efficient use of limited spectrum resources, how will the agency protect the quality and utility of those spectrum bands that may become more crowded in the future?

RESPONSE: The manner in which spectrum is allocated, licensed (or unlicensed) and made available for use, and how interference is defined, disputes are adjudicated, and band-sharing is administered, will have a profound impact on how the wireless marketplace develops. The Commission is careful to evaluate technical considerations, including reducing the potential for interference, prior to allocating

or licensing spectrum. Commission staff works closely with federal partners, commercial licensees and industry to identify and address concerns – and corresponding solutions – in advance. We support measures that promote the efficient use of spectrum and seek to take advantage of technical advancements, such as dynamic spectrum access. We will continue to work closely with federal partners, licensees, and unlicensed users and consumers to determine what will work best.

• For example, how will the FCC ensure that new mobile technologies do not interfere with satellite radio service, which relies on sensitive antennae for picking up distant signals?

RESPONSE: As you may be aware, Sirius-XM asserts that mobile devices transmitting continuous video from a vehicle in the wireless communication service (WCS) spectrum will cause harmful interference to satellite radio reception in nearby vehicles. Conversely, the WCS industry is concerned that unnecessarily conservative technical constraints will impede its ability to effectively provide mobile video, data, and voice service to the public.

The FCC is sensitive to the importance of maintaining the quality and service levels of satellite radio. Accordingly, the stringent rules the FCC engineering staff is recommending are designed to prevent harmful interference to the satellite radio service and quickly remedy interference if it should occur. Recently, a public field test was performed by the trade association representing the majority of WCS licensees (WCS Coalition). In that test, a device representative of that which would be sold to consumers was used to transmit data at rates that would support file transfers or video uploads from the user device. Other vehicles equipped with Sirius-XM radios drove or parked next to the WCS-equipped vehicle. Sirius-XM participated in this demonstration and it was open to the public and was witnessed by about a dozen FCC engineering staff. Interference received by SDARS receivers under this demonstration was insufficient to cause the loss of satellite radio signal for more than an inconsequential interval.

To ensure the most complete and specific participation and analysis possible, Commission staff put on public notice for comment by the parties and the public detailed proposed rules that were informed by the observations at the demonstration. The proposed rules include technical and operational restrictions for WCS and a requirement that WCS licensees cooperate in good faith in the selection and use of new station sites and new frequencies to reduce interference and make the most effective use of the authorized facilities. Under the proposed rules, licensees of stations suffering or causing harmful interference must cooperate in good faith and resolve such problems by mutually satisfactory arrangements. We will be further guided by the specific information and arguments submitted in response to those proposed rules to ensure the continued reception of satellite radio service by the public.

Questions for the Record from Senator Mark Warner to FCC Chairman Julius Genachowski

There has been a great deal of discussion about the possible reclassification of broadband services under Title II of the Communications Act. I recognize the FCC is considering multiple options in response to the ruling and I think it is important for consumers to be able to continue enjoying all the Internet has to offer.

• Do you think it is possible to institute a technology-neutral regulatory framework that includes non-discrimination protections and provides for reasonable network management?

RESPONSE: Yes, but the Commission must carefully consider the legal framework on which it implements those protections. The decision of the United States Court of Appeals for the District of Columbia Circuit in Comcast Corp. v. FCC, 600 F.3d 642 (D.C. Cir. 2010), casts serious doubt on whether the legal framework the Commission chose for broadband Internet services nearly a decade ago is adequate to achieve core broadband policies, which prior Commissions thought they had legal authority to implement. To confront this challenge, I have shared with my fellow Commissioners a draft Notice of Inquiry for their consideration at the Commission's June 17 Open Meeting. This Notice would initiate an agency proceeding to seek public comment on how the Commission should best address the challenge that Comcast has handed us. It would seek comment on all options, and invite any ideas for how the Commission should proceed, including: maintaining the current "information service" classification of services such as cable modem and DSL Internet access; classifying broadband Internet connectivity service as a "telecommunications service" to which all the requirements of Title II of the Communications Act would apply; and a "third way" - similar to the highly successful approach that has been used for cell phone services since 1993 - under which the Commission would identify the Internet connectivity service that is offered as part of wired broadband Internet service as a telecommunications service and forbear from applying all provisions of Title II other than the small number that are needed to implement fundamental universal service, competition, and consumer protection policies. As you know, Chairmen Rockefeller, Waxman, Kerry, and Boucher have announced they will start a process to develop proposals to update the Communications Act. I welcome that process, and the Commission stands ready to serve as a resource to Congress as it considers legislative changes in this area

Specifically on open Internet issues, we will continue to work with stakeholders to find the best approach to preserving the open Internet, and Commission staff is currently reviewing the tens of thousands of comments in the Open Internet proceeding. We look forward to reviewing the responses generated by the Notice of Inquiry on our legal framework for broadband as well.

Is it possible to accomplish this under the provisions of the 1996 Act or have we come to a point where Congress should start considering updating telecommunications law to create a better system that incents business development, provides for reasonable network management—where like forms of traffic are treated similarly—and also maintains open access to the Internet for consumers?

RESPONSE: As you know, Chairmen Rockefeller, Waxman, Kerry, and Boucher have announced they will start a process to develop proposals to update the Communications Act. I welcome that process,

and any new ideas that others may propose to address this issue, and the Commission stands ready to serve as a resource to Congress as it considers legislative changes in this area.

Although I have always believed all Americans should have access to broadband, I'm also concerned about broadband affordability. Commerce Department data shows that while the broadband adoption rate is just 64%, availability is much higher-- 95% of U.S. households have access to broadband.

• Do you think the plan does enough to provide affordable service to Americans? Is it enough to just expand the existing Lifeline program and to build out more services?

RESPONSE: The National Broadband Plan recommends significant changes be made to the Lifeline and Link Up universal service low-income programs that would greatly enhance broadband affordability. Currently, Lifeline discounts offset eligible low-income consumers' recurring monthly telephone charges, while Link Up discounts reduce eligible low-income consumers' one-time telephone connection/installation charges. If both Lifeline and Link Up discounts are expanded to apply to service packages that include broadband, as the National Broadband Plan recommends, eligible low-income consumers would be eligible for discounts for both recurring monthly charges and installation charges for broadband service. Specifically, the National Broadband Plan recommends that: (1) the Commission and states should require eligible telecommunications carriers to permit Lifeline customers to apply Lifeline discounts to any service or package that includes basic voice telephone service; (2) the Commission should integrate the expanded Lifeline and Link Up programs with other state and local e-government efforts; and (3) the Commission should facilitate pilot programs that will produce actionable information to implement the most efficient and effective long-term broadband support mechanism.

• Completing the infrastructure build out is very important to me, but should we be thinking more innovatively in terms of long-term service affordability?

RESPONSE: The National Broadband Plan recommends expanding Lifeline discounts – which currently offset eligible low-income consumers' recurring, monthly telephone charges – to include discounts for service packages that include broadband. This expansion of Lifeline discounts to broadband offerings, if adopted by the Commission, would help ensure that broadband service is affordable on an ongoing basis to eligible low-income consumers. Additionally, the National Broadband Plan recommends that the Commission integrate the expanded Lifeline program with other state and local e-government efforts which may provide low-income consumers with additional ongoing broadband discounts.

As a former Governor who helped bring more broadband to Virginia, the issue of improving rural coverage is a priority for me. Coverage has improved in rural Virginia over the last 10 years but the broadband plan does not appear to address the dead spot issue, which is a huge investment barrier for wireless carriers.

• What should we be doing in rural areas with spotty coverage, particularly given the problem in using and sharing data service? These spotty areas normally have lower tier data speeds, not up to par with those available in urban areas.

RESPONSE: I think that there are a number of steps that we can take to address these issues in rural areas. Rural areas often present special and unique challenges due to environmental or other factors, such as access issues, or topography. Often the biggest challenge in deploying networks in rural areas is cost, due to greater distance between facilities and very low population density over which to spread the cost of buildout.

The Commission has already put in place two initiatives that should provide more information regarding the scope of "spotty service" and "dead spots" or "dead zones" with respect to broadband services. The Consumer Broadband Test (Beta) and the Broadband Dead Zone Reporting Form are now available via the Commission's broadband website. The purpose of the Consumer Broadband Test (Beta) is to give consumers and the Commission additional information about the quality of their broadband connections and to create awareness about the importance of broadband quality in accessing content and services over the internet. The Commission will be able to use the data collected from the Consumer Broadband Test (Beta), along with submitted street addresses, to analyze broadband quality and availability on a geographic basis across the United States.

Additionally, consumers have the ability to report dead zones through the Broadband Dead Zone Reporting Form, which provides interested parties with the opportunity to voluntarily participate in the FCC's effort to pinpoint areas in the United States where Americans are unserved or underserved by broadband access.

The National Broadband Plan also recommends spectrum access models that could be beneficial to rural deployment, including a new contiguous band for unlicensed services. Just as rural WISPs have been able to successfully deploy affordable Wi-Fi networks in their communities, more unlicensed spectrum may allow for greater bandwidth and coverage using similar models. Also, the Plan recommends the creation of a Mobility Fund to provide one-time support for deployment of 3G networks, to bring all states to a minimum level of 3G (or better) mobile service availability.

In addition, the Plan recommends a number of steps to make sure sufficient microwave spectrum is available to help meet current and future needs for backhaul. One of the factors affecting the cost of rural buildout is the cost of backhaul to carry traffic between facilities. Rural carriers in particular are making increasing use of microwave links for backhaul. The Plan recommends revising the Commission's rules to allow for spectrum sharing among various point-to-point services where technologically feasible in order to increase the amount of spectrum available for backhaul by facilitating the efficient use of spectrum by multiple, compatible users. Further, the plan recommends revision of the technical rules for microwave services to allow increased flexibility, for example by modifying minimum throughput rules to allow for modulation techniques that would increase range. While I am heartened by an increasing number of technological solutions to increase the deployment of broadband and the quality of that deployment in rural areas, it is critically important that we pursue all possible avenues to facilitate quality broadband service in rural areas.

The plan gives the government 10 more years in which to devise a plan to build a public safety network.

• Can we be more aggressive in deploying this much-needed network?

RESPONSE: The Commission has begun implementing the Plan's comprehensive strategy for building out a nationwide interoperable public safety wireless broadband network. We recently established the Emergency Response Interoperability Center (ERIC) and the Commission currently has under consideration a waiver order that would enable early deployments in the public safety broadband spectrum. In upcoming months, the Commission will undertake a series of rulemakings that will address roaming and priority access, auction of the D Block, and other elements of the Plan's comprehensive strategy. The Commission is committed to following the aggressive schedule we have set to ensure that our nation's first responders soon have the nationwide network they deserve.

• Are you optimistic that we will have a nationwide interoperability standard in place before we try to build out a nationwide system? It seems like this is a prerequisite if we want to make sure first responders are able to communicate with one another, but it's also disappointing that 9 years after 9/11 we still have not worked out a standard or built the network

RESPONSE: The Commission has already taken important steps to promote interoperability on the public safety broadband network. Under my proposed Order addressing the public safety broadband waivers, the Commission will require states and localities engaged in early deployments to use a common air interface and to adhere to an initial set of interoperability requirements developed by the recently established ERIC. These requirements will be further refined as ERIC develops a more detailed interoperability framework, which will ensure seamless communication on the nationwide network from the start of its development.

Another issue that has been raised by public safety groups relates to priority access to the network in times of crisis. Some in the public safety community seem to be very concerned that under the FCC's plan, priority access may not be provided when it is needed most.

How would you respond to these concerns?

RESPONSE: Under the Plan, public safety agencies will have full use of the 10 MHz of dedicated 700 MHz spectrum that has already been allocated for public safety broadband services. This spectrum will form the foundation of the nationwide public safety broadband network, and will always be available to public safety for its highest-priority communications. In addition, the Commission will

soon commence a rulemaking to ensure that public safety users can obtain quick and reliable roaming and priority access to commercial broadband networks in major emergencies where additional capacity may be required. Commercial 4G technologies can support a variety of newer forms of priority access that can fully meet public safety needs in such emergencies, far beyond anything possible on traditional circuit-switched networks that offer Wireless Priority Service. These 4G technologies also can enable public safety users to prioritize their own traffic more effectively, to ensure that the most vital communications are given the highest priority.

The FCC also included some significant language in the broadband plan regarding the need to fulfill one element of the 1996 Act by providing greater competition in the set-top box market.

• Why do you think it is important to the deployment and use of broadband?

RESPONSE: Innovation in the communications device and application market has driven Internet connectivity and use since the days of dial-up access. Since the early 1990s, computer hardware and software have become more sophisticated and capable of handling higher data rates and web browsers have provided more intuitive user interfaces, both of which have led consumers to subscribe to Internet services and use increasing amounts of data. More recently, innovative mobile devices have increased the adoption and use of wireless broadband. Increased competition in the set-top box market will lead to innovative internet-connected devices that consumers can connect to their televisions, thus encouraging further adoption and use of broadband. Indeed, consumer demand for online video already is beginning to increase, and consumers are showing interest in devices that can access that video over a broadband connection. For example, Netflix recently reported that 55 percent of its 14 million subscribers streamed more than 15 minutes of a movie or television show in the first quarter of 2010, up from 36 percent last year – each of those subscribers accesses that video over a broadband connection. While these numbers are encouraging, they pale in comparison to the more than 95 million households that subscribe to multichannel video services. Unfortunately, a combination of technical and economic factors has discouraged competition in the subscription video device market, which makes it difficult for companies to introduce competitive innovative video devices that appeal to those 95 million households. If the Commission can encourage retail competition for devices that can access subscription multichannel video services, device manufacturers will begin to offer retail products that integrate traditional and online video content. Consumers who purchase those devices specifically for the subscription video also will want to access the full array of services that their devices can provide, which will encourage broadband adoption and use.

Intellectual property protections do not appear to be clearly discussed in the broadband plan.

• Does the FCC intend to look at these issues and how might these issues intersect with privacy concerns and ISP content management or network management issues?

RESPONSE: Under the Communications Act, the FCC has a limited role with respect to intellectual property policy, but we recognize that our actions can affect the transmission of intellectual property over communications networks. Our rules must respect the careful balance Congress has created between creating strong incentives for creators to create and disseminate their works online, and promoting the lawful use of copyrighted works and protecting consumers' privacy rights. For example, Open Internet principles only apply to lawful content, applications, and services—not to activities like unlawful distribution of copyrighted works, which has serious economic consequences. The enforcement of copyright and other laws and the obligations of network openness subject to reasonable network management can and must co-exist.

The plan lays out an aggressive timeline for the spectrum components.

• How do you intend to adhere to the timelines you laid out and when do you expect to complete the final rules for TV white space devices?

RESPONSE: We are currently taking the steps necessary to prepare a decision on the white space petitions for reconsiderations this summer. That action, which will complete our rules for TV white space devices, is part of our Broadband Action Agenda plan.

• Are you open to making changes to those rules which would provide more flexibility for rural broadband applications, such as higher power limits?

RESPONSE: We are looking at all possibilities for providing more flexibility for rural broadband applications, including the option of allowing increased power limits that may facilitate service in rural areas.

• Can this happen within the existing timeline?

RESPONSE: We recognize that the timelines laid out in the NBP are aggressive, and we will need the support of the full Commission, as well as Congress and other federal, state and local agencies, and industry, in order to meet those deadlines.

Regulatory certainty and regulatory flexibility are paradoxical concepts for entrepreneurs, but they are both critically important to the development of new technologies.

 What kind of assurance can you provide to entrepreneurs and investors who are looking to the FCC to carry out a pro-innovation agenda? For example, will there be increased opportunities for new dynamic spectrum access technologies and "smart" radios or other new technologies?

RESPONSE: It is clearly apparent to all of us that the increasing demands for a finite amount of spectrum will necessitate ever more efficient ways to utilize spectrum, which will have to include new techniques, some already developing, some in development, and some yet to be thought of. Obvious among these is spectrum sharing by compatible devices or services, utilization of "smart" radios, "smart" antennas and other "opportunistic" devices and technologies that can provide for more efficient use of spectrum. Nearly ten years ago, the Commission recognized this direction in modifying its equipment rules to accommodate the earliest versions of software radios. More recently, developments of these technologies was fundamental to our adoption of new rules to open the Television White Spaces to new devices. We remain committed to continuing in this direction as these technologies evolve and made this is an important element of the National Broadband Plan.

We have already publicly committed to initiating a proceeding later this year to look further into ways of increasing opportunities for opportunistic use of spectrum. Initial ideas in this area include identifying frequency bands that could be used for innovation in cognitive technologies such as spectrum sensing and "smart" radios and examining ways to expand the use of geo-location databases to identify available spectrum in different frequency bands. In conducting this future proceeding, we are committed to working with the industry, including entrepreneurs, to strike the right balance between providing a level of certainty and allowing for innovation and flexibility to allow nascent technologies to flourish, while at the same time recognizing and protecting the services provided to consumers by incumbent operators and devices.

In my experience, spectrum allocation debates can take a very long time to resolve.

- If broadcasters choose not to voluntarily relinquish spectrum, have you looked into alternative regulatory options such as spectrum sharing?
- Which kinds of alternatives are you considering and how will the Commission balance the interests and expectations of current spectrum users with the demands of consumers and the emergence of new technologies?
- How are you planning to facilitate or rely on negotiated solutions among the interested parties?

RESPONSE: For the Plan to work, we don't need all, or even most licensees to voluntarily reducing use of UHF spectrum by going off the air, channel sharing or moving to the VHF band. If a limited number of broadcasters in a limited number of markets relinquish UHF spectrum, our staff believes we can free up a very significant amount of bandwidth. I believe, and the staff at the FCC believes, that a voluntary approach will work. We do not believe that it will come to the point where we have to examine other mechanisms.

To the second part of the question, one attractive feature of the voluntary approach is that it gives broadcasters additional financing options, which could help fund production of local news and other

community-based programming, and/or investment in advanced broadcast technologies that would allow broadcasters to take advantage of emerging mobile and compression technologies.

To the third part of the question, transparent bidding open to all potentially interested parties is likely to find a better solution than deal-making that is limited to self-selected parties, which often are forced to act with less information than they would have in an auction. Direct negotiations among parties may have a role with respect to technical issues such as interference or coordination.

Do you believe that the Commission should expand on Recommendation 5.5 in the plan? Does the FCC support the spectrum relocation process improvements outlined in legislation before Congress, namely HR 3019?

RESPONSE: Recommendation 5.5 of the National Broadband Plan ("Plan") outlines some revisions for Congress to consider in the Commercial Spectrum Enhancement Act (CSEA) to facilitate relocation of incumbents from federal spectrum that could be licensed for broadband deployment. These recommendations focus on expanding the definition of reimbursable costs to provide federal agencies adequate incentives to vacate federal spectrum.

I agree that the Federal spectrum relocation process can be improved, leading to more efficient use of available spectrum resources while enhancing wireless broadband availability. The CSEA funding mechanism was essential to the relocation of federal incumbents from spectrum the Commission auctioned and licensed for Advanced Wireless Services ("AWS-1").

Any effort to build upon the success of the CSEA and implement possible improvements in the Federal spectrum relocation process, should consider the elements of a successful relocation framework. The objective of a successful framework should be not only to facilitate incumbent relocation from federal spectrum and minimize for prospective bidders the uncertainty associated with the federal relocation process, but also to treat incumbent spectrum users fairly and ensure that vital governmental functions are not adversely affected.

Questions for the Record from Senator Mark Begich to FCC Chairman Julius Genachowski

In your view, what changes to the Communications Act are needed for the FCC to effectively achieve the goals articulated in the plan?

RESPONSE: The majority of the plan's recommendations to the Commission are plainly within the Commission's commonly understood authority. Our authority to implement some, however, is called into question by the recent decision of the United States Court of Appeals for the District of Columbia Circuit in Comcast Corp. v. FCC, 600 F.3d 642 (D.C. Cir. 2010). The Comcast decision casts serious doubt on whether the legal framework the Commission chose for broadband Internet services nearly a decade ago is adequate to achieve core broadband policies, which prior Commissions thought they had legal authority to implement. To confront this challenge, I have shared with my fellow Commissioners a draft Notice of Inquiry for their consideration at the Commission's June 17 Open Meeting. This Notice would initiate an agency proceeding to seek public comment on how the Commission should best address the challenge that Comcast has handed us. It would seek comment on all options, and invite any ideas for how the Commission should proceed, including: maintaining the current "information service" classification of services such as cable modem and DSL Internet access; classifying broadband Internet connectivity service as a "telecommunications service" to which all the requirements of Title II of the Communications Act would apply; and a "third way" similar to the highly successful approach that has been used for cell phone services since 1993 - under which the Commission would identify the Internet connectivity service that is offered as part of wired broadband Internet service as a telecommunications service and forbear from applying all provisions of Title II other than the small number that are needed to implement fundamental universal service, competition, and consumer protection policies. As you know, Chairmen Rockefeller, Waxman, Kerry, and Boucher have announced they will start a process to develop proposals to update the Communications Act. I welcome that process, and any new ideas that others may propose to address this issue, and the Commission stands ready to serve as a resource to Congress as it considers legislative changes in this area.

Thank you very much for your strong support for deployment of broadband on tribal lands and the amount of unserved areas in the US that are tribal lands.

While we all support more broadband in these areas, many still lack basic phone service. How
do you propose to balance the needs of expanding all telecommunications services to Alaska
and other states that lack basic phone service?

RESPONSE: The National Broadband Plan contains several recommendations to address disparities throughout the nation, including on tribal lands and Alaska Native regions. It gives us a roadmap for increasing the nation's standing in broadband deployment and adoption, and for unserved or underserved areas, access to broadband also means quality telephone service for the first time in too many areas.

The Commission took the first critical step by beginning the process of converting the universal service fund over time to fund modern communications networks that support broadband as well as voice service. On April 21, 2010, the Commission adopted a notice of inquiry and notice of proposed rulemaking to examine near- and longer-term processes to target funding toward new deployment of broadband networks in unserved areas while considering final rules to implement a new Connect America Fund mechanism that will efficiently support broadband and voice services. The Commission looks forward to receiving substantial input for this record from tribal governments, so Commission staff can understand and account for unique circumstances present on tribal lands, including Alaska Native regions.

The remote nature of some parts of Alaska has prevented the residents of those areas from gaining even basic telecommunications services. The Commission needs better data on these regions, so it plans to issue a broadband data rulemaking proceeding toward the end of this year, and coordinate with Native American governments to enhance data collection on tribal lands, including Alaska Native regions. The Commission also intends to issue a spectrum on tribal lands rulemaking proceeding during the fourth quarter of this year to examine increasing mobile opportunities in Native American communities, and follow with a rural health care reform rulemaking proceeding with an eye toward bringing access to world-class healthcare for tribal and remote regions.

I commend your sensitivity to the difficulties of serving residents of Tribal Lands, including Alaska, following the FCC's long precedent of policies designed to address the unique and complex deployment challenges of serving these areas.

- Will you continue to work with me to ensure that FCC broadband policies recognizing the unique challenges of Tribal Lands are responsive to my constituents' needs?
- Specifically I would like to you to carefully consider keeping the exemption from interim cap for tribal lands that was put in place for the high cost fund as the FCC moves toward a new model of support. I am very concerned about the impact the changes will have on the investment in Alaska infrastructure and the companies who work hard to deploy service to some of the most unserved areas of the nation.

RESPONSE: As we move forward with universal service reform, including possible changes to the interim cap on competitive eligible telecommunications carrier support, the Commission intends to consider unique circumstances present on tribal lands, including Alaska Native regions. Indeed, on April 21, 2010, the Commission adopted a notice of inquiry and notice of proposed rulemaking, the Commission specifically sought comment on whether there are any unique circumstances on tribal lands, including Alaska Native regions, that would necessitate a different approach.

Under Recommendation 9.7, the Plan calls on the FCC to create an FCC Office of Tribal Affairs and a Tribal seat on the USAC Board.

• Are you able to give us a timeline of implementation of these specific actions?

RESPONSE: Launch of the FCC's Office of Native American Affairs is targeted for June 2010. Adding Tribal representation to the USAC Board requires amendment of the Commission's rules.

Many rural Incumbent Local Exchange Companies (ILECs) are concerned with the reform suggestions outlined in the National Broadband Plan.

- Can you direct me to where the plan discusses the level of high-speed broadband now available
 to customers served by rural Incumbent Local Exchange Companies (ILECs) vs. those served by
 Bell Operating Companies (BOCs) and other non-rural telecoms?
- Follow up: Can you ask the broadband staff to prepare this comparison? I anticipate that there
 is far greater deployment available in areas served by rural telephone companies because of the
 universal service system and regulatory framework applicable to the rural incumbents. I would
 like to make certain the commission has those facts before them as we go forward.

RESPONSE: The Plan, as well as a recent technical paper "The Broadband Availability Gap," provide data on the fraction of unserved housing units that are in areas served by a Bell Operating Company, a mid-size price cap carrier, and a rate of return carrier. The Plan estimated that:

- 52% of unserved housing units are in census blocks in which one of the three Regional Bell
 Operating Companies (AT&T, Verizon or Qwest) is the incumbent local exchange carrier;
- 15% of the unserved housing units are in census blocks where a mid-sized price-cap carrier is the incumbent provider; and
- One-third (33%) of unserved housing units are in census blocks where a rate-of-return carrier is the incumbent provider.

To measure broadband deployment progress, the Commission needs accurate, up-to-date data. Moreover, the Commission's Broadband Action Agenda includes opening a proceeding later this year to improve the data it collects on broadband deployment. At present, the data on availability provide very limited insight as to whether any one particular regulatory regime, which provides support for voice services, has had an impact on broadband deployment.

- Do you believe that it is generally understood that investment in broadband compliant infrastructure in rural areas is driven by the contrasting regulatory regimes in place for rural ILECs and non-rural ILECs?
- Follow up: I think we all should have quantifiable information as we go forward with implementing this plan. With all the time and effort that your broadband staff has already undertaken, I hope it won't be difficult to provide us with a summary that demonstrates how extensive broadband high speed deployment has been in areas served by rural incumbent carriers subject to common carriage rate of return regulation compared to the broadband deployment in rural areas served by price cap companies providing high speed internet as a non common carrier service.

RESPONSE: As noted in the preceding answer, there are unserved communities in areas served by both price cap and rate of return carriers. Absent comprehensive reform, many communities in America will never have access to broadband because there is no private sector business case to serve these areas. Leaving some communities behind is not consistent with the country's long-standing goal of universal service. This digital divide exists today and will only get worse if the universal service system is not fundamentally reformed. Thus, comprehensive reform to the universal service system is necessary to ensure that all communities have access to broadband. The Commission looks forward to gathering more information through our rulemaking process to assist us in crafting the appropriate policies in this area.

• If rate of return regulation for rural companies has resulted in rural areas obtaining significant high speed broadband availability but price cap regulation for BOCs has resulted in little deployment in the rural areas they serve, why does the report propose to end rate of return regulation when it is rate of return regulation that has had success in meeting the goals of high speed broadband deployment?

RESPONSE: The National Broadband Plan sets forth a vision to provide broadband access to all Americans, regardless of where they live and regardless of the regulatory classification of their carrier. Both price cap and rate-of-return carriers, have made significant investments in broadband. As noted above, the Plan, as well as a recent technical paper "The Broadband Availability Gap," provide data on the fraction of unserved housing units that are in areas served by a Bell Operating Company, a mid-size price cap carrier, and a rate of return carrier. The Plan estimated that:

- 52% of unserved housing units are in census blocks in which one of the three Regional Bell Operating Companies (AT&T, Verizon or Qwest) is the incumbent local exchange carrier;
- 15% of the unserved housing units are in census blocks where a mid-sized price-cap carrier is the incumbent provider; and
- One-third (33%) of unserved housing units are in census blocks where a rate-of-return carrier is the incumbent provider.

As one critical step to achieve the goal of universal broadband, the Commission must reconfigure the current High-Cost universal service fund, which is designed to support voice service, to a new universal service program, described in the Plan as the "Connect America Fund," that will provide support for broadband networks capable of providing voice services. As part of this conversion, the Plan recommends moving rate-of-return carriers to incentive regulation. The Plan does not, however, specify the type of incentive regulation, such as price cap.

A shift from rate-of-return to incentive regulation advances both to the general goal of ensuring widespread deployment of broadband networks and the specific tool of universal service reform. Rate-of-return regulation was implemented at a time when monopoly providers offered regulated voice telephone service over copper wires in a particular geographic area. Such an era no longer reflects the reality of converging technologies and competition in the 21st century broadband world. Indeed, a growing number of rural carriers have voluntarily elected to convert to price cap regulation to become more efficient and competitive. Moreover, the conversion to incentive regulation could help limit growth in the legacy High-Cost universal service fund while the Commission moves to adopt a more efficient and targeted funding mechanism for government support for broadband investment.

Incentive regulation could take many forms. Indeed, the majority of states have already recognized the benefits of moving to some form of incentive regulation – with over 30 states having already eliminated rate of return regulation for local rates. States have found it possible to craft regimes that provide the necessary stability for ongoing investment. The Commission is seeking comment on the recommendation in the Plan, including the proposal to move to incentive regulation. The Commission also asks parties to suggest other alternatives that would allow the Commission to achieve the National Broadband Plan goals of world-leading, affordable broadband service for all Americans. The Commission welcomes and encourages all interested parties to provide suggestions, data and recommendations in response to the Notice.

• Why did the plan settle on the download speed of 4 MB (megabits per second) by 2020? It seems a bit modest for a goal.

RESPONSE: The Commission analyzed consumer usage of broadband speeds to set an initial target of 4 Mbps of actual download speed and 1 Mbps of actual upload speed, which is quite aggressive. It is one of the highest universalization targets in the world. Many nations, such as South Korea and Finland, have already adopted short-term download targets around 1 Mbps. In addition, the 4 Mbps is comparable to the median speed received by residential consumers today, and what many consumers are likely to use in the near term, given past growth rates

To ensure that consumers in rural areas receive broadband speeds comparable to urban areas, the Plan also recommends reevaluating this 4 Mbps funding target every four years and adjusting it as appropriate to reflect changing consumer use and demand to ensure that rural areas continue to receive service that is reasonably comparable to service in urban areas. Doing so will ensure that there is no digital divide in this country.

Does this goal provide a competitive benefit to wireless technology?

RESPONSE: The Plan is technology and provider neutral. The Plan recommends that any provider that is able to meet the qualifications set forth by the Commission will be eligible to receive support to deploy broadband. The public and interested parties will have ample opportunity to comment and provide suggestions on what the criteria should be adopted to be eligible for distribution of support.

The CLECs who serve rural Alaska communities have been investing in mobile services and bringing cell phones to regions of the state that previously were unserved. They are very concerned the transition away from the High Cost Fund. Under a current order from the FCC, the CLECs are exempted from a cap on the High Cost Fund.

 Will you look into the possibility of extending this exemption on tribal lands as you move forward on USF reforms? RESPONSE: In considering any universal service reforms, we will consider whether an exemption should be made for tribal lands, including Alaska Native regions, or any other region where unique circumstances necessitate a different approach. Indeed, in the universal service reform notice of inquiry and notice of proposed rulemaking adopted on April 21, 2010, the Commission specifically sought comment on whether there are any unique circumstances on tribal lands, including Alaska Native Regions, that would necessitate a different approach.

Many critics of the plan believe investment in networks will be chilled by the work of the National Broadband plan.

• Some people have expressed concerns that the Plan may produce the unintended consequence of chilling investment in these networks. Can you please address these concerns?

RESPONSE: The National Broadband Plan sets forth recommendations that are designed to encourage, not discourage, investment in broadband networks. While I don't know the specific proposals that these concerns reference, the Commission intends to move forward in an open and data-driven manner with the goal of expanding and improving broadband networks, and removing barriers to innovation and investment throughout the nation.

I appreciate push to bring the country to a 4G world – but the plan highlights that the Chairman Rockefeller and my states lag behind in populations with access to a 3G network, with West Virginia 71 percent and Alaska with 77 percent covered.

As you know, the remaining percentage will be the most difficult and costly to cover. Can you
discuss some of the funding changes proposed for network build out? (Chapter 8.3)

RESPONSE: As you have noted, building out networks on sparsely populated and/or remote areas can be very costly. Nonetheless, as a nation we need to ensure that no population is left out of the benefits that come with access to mobile broadband. The Plan proposes the creation of a Mobility Fund, as part of broader reforms of the Universal Service Fund. Without increasing the overall size of universal service funding, the Plan recommends providing one-time support for deployment of infrastructure enabling robust mobile broadband networks, to bring all states to a minimum level of mobile availability. Bringing all states up to a national standard will help enable Americans in unserved areas participate in the mobile revolution. I have directed staff to prepare a specific proposal for a Mobility Fund for Commission vote this fall.

I also appreciate the recognition that the FCC gives to the most under and unserved populations, tribal communities. I received many complains in my office regarding the broadband ARRA programs and their perceived failure to accommodate the needs of tribal communities.

• For future grant programs under NTIA (BTOP) and Rural Utilities Service, do you have recommendations on how to improve the process for tribal communities?

RESPONSE: The Commission is not involved with the evaluation or review of the Broadband Technology Opportunities Program (BTOP). Concerns regarding the BTOP process should be directed to NTIA.

The Broadband plan notes that rural Americans are significantly less likely to subscribe to broadband Internet access than their counterparts in urban areas.

 As you may know, Alaska has many rural communities. What strategies will you use to close the gap?

RESPONSE: Many of the adoption recommendations included in the National Broadband Plan are similar to those proposed in the first round BTOP application submitted by the University of Alaska for their Bridging the e-Skills Gap in Alaska program. For example, the Digital Literacy Corps, if funded, could provide digital skills training to a group of local rural residents, who, as trusted members of their communities, could help other residents understand the value of broadband and acquire the skills needed to navigate online environments. The Plan also recommends targeted awareness programs and a best practices clearinghouse, which would help rural communities share best practices and eliminate redundant efforts, both of which were included in the Alaska proposal. Additionally, the Plan suggests continuing support for state level initiatives, which could allow Alaska more ability to plan and implement programs specifically tailored to meet the state's needs and the unique adoption barriers faced by its citizens.

Low-income residents may also benefit from the plan's recommendation to expand low income Universal Service support to broadband, and Native Alaskans will benefit from recommendations designed to increase adoption and deployment of broadband on Tribal lands such as the Tribal Broadband Fund.

In the Plan, the FCC shows that adoption on Tribal lands is extremely low because broadband has not been built out to these areas.

In Alaska, we have many regions that are either underserved or not served at all. How do you
plan to address this from both the wireline and the wireless perspective? Additionally, will you
discuss how you believe the Commission should move forward in modifying the Tribal Land
Bidding Credit (pg 97 of NBP)?

RESPONSE: As noted above, the National Broadband Plan aims to provide several tools to address disparities throughout the nation, including on tribal lands and Alaska Native regions. The Commission took the first critical step by beginning the process of converting the universal service fund over time to fund modern communications networks that support broadband as well as voice

service. On April 21, 2010, the Commission adopted a notice of inquiry and notice of proposed rulemaking to examine near- and longer-term processes to target funding toward new deployment of broadband networks in unserved areas while considering final rules to implement a new Connect America Fund mechanism that will efficiently support universal access to broadband and voice services. The Commission looks forward to receiving substantial input for this record from tribal governments, so Commission staff can understand and account for unique circumstances present on tribal lands, including Alaska Native regions.

Recommendation 5.17 of the Plan outlines five specific actions to be undertaken as the Commission considers the unique spectrum needs of Tribal lands, which are intended to assist the development of wireless services. First, in connection with the recently launched Spectrum Dashboard, Commission staff is continuing to explore and implement improvements to the database that will assist in spectrum policy planning and decision making, promote a robust secondary market in spectrum and improve communications services in all areas of the U.S., including rural, underserved and Tribal lands. As a first step, we are seeking to develop a search feature that would identify spectrum licensed on federally recognized Tribal lands.

Second, as you note, I have directed staff to explore changes to the Tribal Land Bidding Credit program. I have asked staff to prepare an NPRM for the 4th quarter of this year proposing rules to promote greater use of spectrum on Tribal lands in coordination with Tribal governments, including possible revisions to the Tribal Land Bidding Credit. In that regard, we would seek comment on possible improvements to our program for providing Tribal Land Bidding Credits, including modifications to facilitate Tribal access to spectrum on Tribal lands.

Third, we will explore establishing a Tribal Priority for wireless licenses covering Tribal lands. While the statutory and regulatory procedures for licensing wireless services are different in some respects from those applicable to broadcast stations, the Tribal Priority recently adopted for the threshold stage of FM radio allotment and AM radio licensing could be a model for establishing a similar priority in the wireless context.

Fourth, we will explore creating additional flexibility and incentives for build out of facilities serving Tribal lands.

Fifth, the Plan recommends expeditious resolution of pending petitions for reconsideration in the White Space proceeding and proceed with a Notice of Inquiry to consider higher power fixed operations in rural areas, which often include Tribal lands. I have directed staff to complete the final rules for TV white space devices by resolving outstanding challenges to those rules in the 3rd quarter of this year.

Several other aspects of the Plan propose action to address the need to ensure that services reach all parts of the country. Recommendation 8.3 proposes the creation of the Mobility Fund to provide one-time support for deployment of 3G networks, to bring all states to a minimum level of 3G (or better) mobile service availability. This proposal, along with proposals with respect to other mechanisms mentioned above, such as the Connect America Fund, will assist the build out of wireless services.

Many Alaskans are concerned about rising monthly bills due to surcharges and line items that were not made clear to them when they signed up for service.

What steps can the FCC take to improve transparency in billing?

RESPONSE: In August 2009 the FCC released a broad Notice of Inquiry (NOI) as part of its Truth-in-Billing proceeding seeking information on opportunities to protect and empower American consumers by ensuring that consumers have sufficient access to relevant information about communications services. The Consumer Information and Disclosure NOI asked questions about the adequacy of information available to consumers at all stages of the purchasing process, including: 1) choosing a provider, 2) choosing a service plan, 3) managing use of the service plan, and 4) deciding whether and when to switch to a different provider or plan. The Consumer Information and Disclosure NOI asks these questions about all communications services used by consumers, including wireline and wireless, broadband, and video subscription services. The NOI also recognized that "access to accurate information plays a central role in maintaining a well-functioning marketplace that encourages competition, innovation, low prices and high-quality services." (NOI at para. 5.) FCC staff are reviewing the record compiled in response to the NOI and considering appropriate next steps for protecting consumers.

It's alarming to me that the FCC has found that broadband providers often times don't actually deliver the speeds they advertise.

How can consumers make these important decisions when they don't know what speeds they
are signing up for?

RESPONSE: The FCC also recognized the importance of consumer information to meaningful competition in its National Broadband Plan (NBP), stating: "Consumers need more information about the speed and overall performance of the [broadband] services they receive and of competitive offers in their area, and about the gap between actual and advertised speeds and the implications of that difference." (NPB at p.44.) To provide consumers this necessary information, the NBP recommends that the FCC, in coordination with the National Institute of Standards and Technology, establish technical broadband measurement standards and a methodology and process for updating them. It also recommends that the FCC encourage the formation of a partnership of industry and consumer groups to provide input on these standards and this methodology. Further, the Plan recommends that the FCC continue measuring and publishing data on actual performance of broadband services and initiate a rulemaking proceeding to determine performance disclosure requirements for broadband. The FCC has posted on its website links to broadband speed measurement tools available free to all consumers from any location where they use broadband service, and FCC staff have begun work to implement the Plan's additional recommendations. Further to the NBP recommendation, the FCC recently contracted with a third-party, SamKnows Limited, to begin measuring broadband speeds.

The NBP (National Broadband Plan) notes that Americans in low-income households subscribe to broadband Internet at much lower rates than their more affluent counterparts, even though they adopt mobile and pay-TV services at nearly the same rates.

Can you try to explain this difference? How is the Commission going to tackle this problem it?

RESPONSE: An FCC survey conducted in developing the NBP identified three major barriers that keep non-adopters from getting broadband: 1) cost, 2) digital literacy, and 3) relevance. (NPB at 170.) In addition to outlining guiding principles for improving broadband adoption and utilization, the Plan made specific recommendations for addressing each barrier. The Plan's recommendations for addressing the cost barrier include expanding the current Universal Service Lifeline Assistance and Link-Up America programs to make broadband more affordable for low-income households and considering free or very low-cost wireless broadband as a means to address affordability. In addition, ensuring competition and a well-functioning marketplace by providing all consumers with the information needed to make purchasing decisions may also help make broadband more affordable.

The FCC has developed an outreach and educational structure to reach targeted constituencies. These constituencies align with those highlighted in the NBP. We will be working with national, state and local governments and community organizations. Specifically, our targeted constituencies are African American, Hispanic, Senior, Rural and Tribal. While we are targeting these groups, we also are working with organizations that will aid us in lifting some of the adoption barriers, such as libraries, senior and community centers, schools and local organizations.

How does the FCC plan to promote innovation in content and online applications?

RESPONSE: Promoting innovation in content and online applications is a key goal of the Commission's ongoing Open Internet proceeding. I believe that high-level rules of the road to preserve the free and open Internet can help ensure that content and application innovation continues to flourish online. The Commission moved forward last month with a proceeding to promote innovation and consumer choice in the video-device marketplace, which will help foster more innovative content and applications, implementing a key recommendation of the National Broadband Plan. The National Broadband Plan contains a number of other recommendations to promote innovation in online content and applications, e.g., regarding privacy, the smart grid, health IT, and online learning. The FCC is working to help implement those recommendations, either directly or by assisting other government agencies and stakeholders.

Mr. Chairman, I wanted to bring your attention to the letter Senator Wicker and I sent to you last month regarding data roaming issues and the current open proceeding.

• Can you give us a more specific timeline on this moving forward proceeding?

RESPONSE: In April, the FCC sought additional comment on whether to extend automatic roaming obligations to mobile data services. Comments are due June 14, 2010, and reply comments are due

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July 12, 2010. I look forward to reviewing the record and working with my fellow Commissioners to determine, in an expeditious manner, the path forward that best serves American consumers with a focus on the importance of data roaming for rural Americans.