

Full Committee Hearing  
Senate Committee on Commerce, Science, and Transportation  
Written Questions for the Record from Chairman John Thune for Jessica Rosenworcel

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***Question 1. Millions of rural Americans lack access to broadband, and bridging the digital divide is a priority for me and the Committee. As traditional fiber, cable, and 4G broadband is deployed throughout the country, policymakers must nevertheless be creative and open-minded when exploring all options to achieving universal service. What role do you see for unlicensed spectrum (Wi-Fi, TV White Spaces, millimeter wave, etc.) in connecting unserved rural households with broadband internet access?***

Broadband is more than a technology—it is a platform for opportunity. No matter who you are or where you live, you need access to broadband communications for a fair shot at 21st century success. This is true in urban America, rural America, and everything in between.

However, access in rural communities can present a real challenge. Often the cost of financing, constructing, and operating broadband networks in remote areas is high while the number of households and businesses over which that cost is spread is low. As a result, the Commission has had a series of policies designed to boost deployment in the nation's most difficult to serve rural areas. The most prominent of these is the high-cost universal service fund, which provides roughly \$4.5 billion in annual support to wired and wireless providers serving some of our most remote communities. Other policies, however, also assist with universal service, including build-out requirements for spectrum licensees providing wireless service that help ensure deployment covers both urban and rural populations.

Nonetheless, the data suggests that despite these efforts too many rural areas are still at risk of being consigned to the wrong side of the digital divide. In fact, in 2016 the Commission found that more than 23 million Americans in rural areas lack access to broadband. By any measure, this number is too high.

For this reason, I agree that policymakers must be willing to look at all options to achieve true universal service. As a result, I believe the Commission should always be on the hunt for good ideas that will extend the opportunities of broadband to rural communities at low cost.

The use of unlicensed spectrum in the 600 MHz band—or TV White Spaces—is one such opportunity. The use of TV White Spaces was first approved by the Commission in 2010. At that time, it updated its Part 15 rules to allow for unlicensed fixed and portable devices to operate in the broadcast television spectrum at locations where that spectrum was not in use by licensed services. In order to prevent interference to other services operating in the band—namely television—the Commission relied on geolocation capabilities in white space devices as well as databases to identify vacant channels.

In the aftermath of the 600 MHz band spectrum incentive auction there will be new opportunities to explore the use of TV White Spaces to expand broadband access. I believe the Commission can seek to develop these opportunities while also protecting incumbent services from harmful interference.

There also may be opportunities to expand the use of unlicensed spectrum in the upper portion of the 5 GHz band. At present, the Commission is working with the National Telecommunications and Information Administration and Department of Transportation on a series of tests to examine the compatibility of unlicensed devices and dedicated short range communications systems in this band. I am hopeful that this testing will result in new opportunities for unlicensed Wi-Fi services in this band—while also ensuring that automotive safety efforts using dedicated short range communications can continue.

In addition, the Commission has sought to increase the availability of unlicensed spectrum in millimeter wave bands. To this end, last year the agency established a new unlicensed band at 64-71 GHz, making a 14 gigahertz unlicensed band from 57-71 GHz. While the propagation characteristics of these airwaves present real challenges, I am confident there will be new developments in the use of millimeter wave bands that may eventually have applications in rural communities.

I support these efforts because it is essential that the Commission is, as you suggest, creative and open-minded with respect to policies designed to improve universal service and bring broadband to our nation's most rural communities. If re-confirmed, I pledge to continue to do so.

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Written Questions for the Record from Senator Roy Blunt for Jessica Rosenworcel

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***Question 1. AT&T's Twitter feed was mysteriously blocked when AT&T announced that it would participate in the so-called Internet Day of Action.***

**While the network neutrality debate has seemingly focused on ISPs, large social media platforms such as Twitter serve as a gatekeeper for information distributed to millions of Internet users.**

**Should large social media platforms such as Twitter be prohibited from blocking access to content that Twitter or its employees may find objectionable?**

I share your concern that this content was not available. This is not, however, a platform subject to the Communications Act. Moreover, I believe that however well intended, a new, government-based requirement on such platforms could result in an updated version of the Fairness Doctrine. Because I believe that this policy had a chilling effect on speech, I would not support such an approach.

***Question 2. Does it seem intellectually inconsistent for ISPs to be prohibited from blocking lawful content, but large social media platforms should be permitted to do so?***

To the extent there is incongruity here, it is largely a function of law. Companies that do not provide telecommunications are not offering services subject to the Communications Act nor the jurisdiction of the Commission more generally.

***Question 3. If confirmed, do you intend to vigorously enforce laws prohibiting the broadcast of indecent material outside of the safe-harbor, when children are likely to be in the viewing audience?***

Yes.

***Question 4. What will you do to ensure television ratings accurately reflect the content on screen, and that there is greater accountability to parents and families in the application and review of TV ratings?***

Television has the power to enlighten and entertain. But not all programming is enriching or appropriate for children. Recognizing this fact, in the Telecommunications Act of 1996 Congress called on the entertainment industry to establish a voluntary television rating system to help provide parents with the tools to block programming that is inappropriate for younger viewers. As a result of this effort, a voluntary ratings system, known as the TV Parental Guidelines, was adopted by television broadcasters and networks, cable networks and systems, and television programming producers. To help implement these guidelines accurately and consistently, an Oversight Monitoring Board was established. This board includes up to 24 members, including industry leaders and public interest representatives.

More than two decades hence, I believe it reasonable for the Commission to review this program and if necessary, encourage improvements. If re-confirmed, I would support such a re-assessment in order to ensure that this approach remains consistent with the law and ultimately useful for parents and families.

***Question 5. The Americans with Disabilities Act (ADA) provides that deaf and hearing-impaired individuals have access to telecommunications services in the same way as those without hearing impairments.***

**If you are confirmed, will you pledge to honor this ADA requirement and ensure access for those of all ages, including our growing senior citizen population?**

Yes. More than a quarter of a century ago, the Americans with Disabilities Act paved the way for the meaningful inclusion of 54 million Americans with disabilities in modern civic and commercial life. The direction in this law to ensure functionally equivalent access to communications remains the cornerstone of Commission efforts to ensure that individuals with hearing impairments have the ability to pick up the phone; connect with family, friends, and business associates; and participate fully in the world. It is especially important for senior citizens, with nearly half of the population over 75 reporting hearing difficulties.

Pursuant to the Americans with Disabilities Act, as updated by the Twenty-First Century Communications and Video Accessibility Act, the Commission has made strides in its policies to expand access to modern communications to the hearing-impaired. These efforts include continued support for telecommunications relay service, including Video Relay Service and Internet Protocol Captioned Telephone Service. It also includes the exploration of new forms of service, including Real-Time Text. In addition, the Commission has expanded the number of wireless handset models that are hearing-aid compatible, established the National Deaf-Blind Equipment Distribution Program in order to increase access to essential equipment for low-income individuals who are deaf-blind, and promoted increased access to emergency communications through the availability of texting-to-911. The Commission also has updated its policies regarding closed captioning, in order to improve the accuracy and completeness of captions.

I support these efforts because I believe they are essential for functionally equivalent access to communications services. But I also believe that as time and technology advance, it is incumbent on the Commission to review these policies in order to ensure that they are up to date. If re-confirmed, I pledge to work with my colleagues to do so.

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Written Questions for the Record from Senator Ted Cruz for Jessica Rosenworcel

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**Net Neutrality**

So called “net neutrality” as implemented in former FCC Chairman Tom Wheeler’s Open Internet Order was a bureaucratic power grab that took the Internet which has long been a transformational tool that has allowed innovation and creativity and created new economic opportunities for all Americans and turned the Internet into a regulated public utility under Title II of the Communications Act. Title II gives the government new authority over the Internet which could be used to determine pricing and terms of service.

What’s concerning about the Title II debate is the influence that edge providers such as Google, Facebook and Netflix had with the Obama White House. For example, *The Intercept* has reported that between January 2009 and October 2015, Google staffers gathered at the White House on 427 separate occasions. *The Intercept* further notes that the frequency of the meetings increased from 32 in 2009 to 97 in 2014.

This is concerning given that President Obama released a video on November 10, 2014 weighing into the net neutrality debate and advocated that the FCC regulate the Internet as a public utility. Not only did the Commission move forward and implement Title II but edge providers like Google were exempted from Title II.

*Question 1.* As you know, last week tech companies were involved in a so called, “Internet Day of Action” that was meant to support keeping Title II reclassification. I found it interesting that AT&T’s Twitter feed was mysteriously blocked when AT&T announced that it would participate in the Internet Day of Action. While the network neutrality debate has seemingly focused on Internet Service Providers (ISPs), large social media platforms such as Twitter serve as a gatekeeper for information distributed to millions of Internet users. Should large social media platforms such as Twitter be prohibited from blocking access to content that Twitter or its employees may find objectionable? Does it seem intellectually inconsistent for ISPs to be prohibited from blocking lawful content, but large social media platforms should be permitted to do so?

I share your concern that this content was not available. However, to the extent there is incongruity here, it is largely a function of law. Companies that do not provide telecommunications are not offering services subject to the Communications Act nor the jurisdiction of the Commission more generally.

**Federal Spectrum**

FCC Commissioner Michael O’Rielly stated in a 2015 blog post that, “By some accounts, the Federal government currently occupies- either exclusively or on a primary basis- between 60 and 70 percent of all spectrum in the commercially most valuable range

between 225 megahertz and 3.7 gigahertz, which comes to approximately 2,417 megahertz.”

***Question 2. What steps can this Committee take to incentive federal users, especially the Department of Defense, to make more spectrum available for commercial use? Should Congress consider allowing federal agencies to keep more of the proceeds from FCC incentive auctions?***

I agree with the need to develop incentives to encourage federal authorities with substantial spectrum holdings to make more of their spectrum available for new commercial use. In fact, I testified on this subject before the Committee on Commerce, Science and Transportation on July 29, 2015.

Today, federal authorities have substantial spectrum assignments. Many critical missions throughout the government are dependent on wireless service. This includes systems that help defend us from attack, manage our air traffic, and monitor our water supplies. We should recognize that these are important tasks. However, we also should be willing to re-assess the airwaves used in service of these missions if there are opportunities to re-purpose them for new commercial use without sacrificing important federal objectives.

Under our current system, efforts to re-purpose these airwaves can take years. These efforts typically involve a lot of legislative pressure and regulatory coaxing because existing government users rarely respond with enthusiasm when facing the reclamation of airwaves they presently use. But when these efforts to reclaim spectrum are successful, a three-part process follows. First, the government users are cleared out of a portion of their airwaves. Second, the government users are relocated. Third, the freed spectrum is auctioned for new commercial use. This is a slow and cumbersome process. It’s not the steady spectrum pipeline the modern mobile economy needs.

A better system would be built on carrots rather than sticks. If we want a robust and reliable spectrum pipeline, it is essential that federal authorities see gain—and not just loss—when their airwaves are reallocated for new mobile broadband use.

The best way to do this is to develop a series of incentives to serve as the catalyst for freeing more spectrum for commercial markets. This could include, as you suggest, expanding incentive auctions to federal spectrum users. Such auctions could be modeled on the recent incentive auction in the 600 MHz band. Participating federal authorities could receive a cut of the revenue from the commercial auction of the airwaves they clear—and could then use these funds to support relocation or other initiatives approved by Congress, including some that may have been lost to sequestration. This is a complex undertaking, because federal authorities are subject to annual budget allocations and therefore do not operate in a strictly market environment. Nonetheless, I believe it is an idea worth pursuing with discrete spectrum bands or agencies.

In addition, Congress could choose to update the Spectrum Relocation Fund. Today this fund assists federal authorities with relocating their wireless functions when their spectrum is being repurposed for commercial use. But this fund also could be structured to provide incentives for

government sharing by rewarding federal users when they share their spectrum with agencies that are being relocated.

There are also laws that create perverse incentives that need review. This includes the Miscellaneous Receipts Act. This law can prevent negotiations between federal agencies and winning bidders in wireless auctions. But with changes, it could lead to the auction of imperfect rights that would permit winning bidders to negotiate directly with federal authorities remaining in the band in order to help meet their wireless needs. This could speed repurposing of our airwaves and also provide commercial carriers with incentives to help update federal systems that are past their prime.

**On the flip side, a slightly different approach to incentivizing the relinquishment of underutilized federal spectrum would be the enactment of spectrum fees. Brent Skorup at the Mercatus Center has written that, “Some countries have applied spectrum fees to government users, which generally attempt to approximate the opportunity cost of the spectrum so that users internalize the social value of the spectrum they occupy. If the opportunity cost fees are high, a user will be induced to use less spectrum to reduce its fees or leave the space completely and sell the cleared spectrum for higher-valued uses.”**

***Question 3. Should Congress implement a spectrum fee to incentive federal users to consider relinquishing underutilized spectrum?***

I am concerned that federal users are not required to internalize the cost of their spectrum holdings. There is no budgetary system to account for these holdings, nor uniform method to enumerate the value of these assets. One way to ensure that government use is efficient involves the introduction of spectrum fees, as has been done by some countries to approximate the opportunity cost of continued noncommercial use of certain airwaves. However, in the near term I believe Congress should focus on the intermediate step of having the Office of Management and Budget develop a uniform system of valuation of federal spectrum assignments. Such a system could eventually be used to develop incentives to promote the efficient use of airwaves and assist with the repurposing of federal airwaves for new commercial use.

### **5G Wireless Technology Deployment**

**We are on the cusp of the wireless industry introducing the next generation of technology – 5G. That upgrade to our existing networks is expected to bring us higher data speeds, lower latency, and the ability to support breakthrough innovations in transportation, healthcare, energy and other sectors. And as recent studies have shown, 5G is expected to provide significant benefits to state and local governments, allowing them to become smart cities. However, those networks will also require many more antenna sites than we have today – they will increasingly rely on small cell technologies. To recognize these benefits, a study performed by Deloitte shows that several steps are necessary to remove impediments to antenna siting. Texas is leading the way, as evidenced by recent legislation (Texas Senate Bill 1004) signed into law just last month that streamlines the deployment of next-generation 5G networks. It’s also my understanding that the Commission has initiated a proceeding designed to evaluate whether some of those obstacles can be removed.**

***Question 4. Do you support the Commission's efforts in this area? Do you think that the Commission's proposals are achievable, particularly considering state and local government interests in this area?***

Yes. I am optimistic that the Broadband Deployment Advisory Committee, recently established by Chairman Pai, can be a useful forum for discussing these matters and improving the prospects for deployment of next-generation 5G infrastructure. In particular, I am hopeful that this group will be able to develop a streamlined, model code for state and local authorities to use for facilities siting. Then I believe the Commission should study its own policies to identify ways to incentivize officials to implement this code in order to expedite deployment further.

I also believe it is important for the federal government to lead by example. By some measures nearly one-third of all property in the United States is federal land. The Commission should work with the federal authorities with facilities on this land—including the Department of Interior, Department of Agriculture, and Department of Transportation—to develop a Memorandum of Understanding that would streamline the siting of network infrastructure.

**FCC Priorities**

***Question 5. My top priority is regulatory reform. Please identify three meaningful regulations that you are interested in repealing during your tenure at the FCC.***

I believe the Commission should eliminate the reporting obligation associated with the Open-Market Reorganization for the Betterment of International Telecommunications Act. The analysis in this report provides little to no benefit to the satellite industry, in light of the fact that the essential purposes of this law were fulfilled by the privatization of INTELSAT and Inmarsat more than a decade ago. To the extent that the Commission is unable to do this under existing law, it should seek assistance from Congress to eliminate this obligation.

I believe the Commission should reduce the filing obligations that remain on carriers completing payphone calls. There has been a sharp decline the number of payphones and the volume of calls completed on these facilities. It is time for the Commission to update its policies to reflect this reality—and it can begin by removing the costly requirement for providers to file an annual audit of their payphone call tracking systems.

I believe the Commission should eliminate the requirement that providers of international telecommunications services report annually on their traffic and revenue for international voice services, international miscellaneous services, and international common carrier lines. These requirements were put in place to help the Commission monitor settlement rates as part of its international benchmark policy. But with the growth in competition and liberalization of international services, this set of filings is no longer necessary nor useful.

## ICANN

***Question 6. Last year the previous administration allowed the Federal Government's contract with ICANN to expire. Do you think that was a wise and prudent decision?***

During my prior tenure at the Commission I did not participate in domestic or international meetings concerning the expiration of the Internet Corporation for Assigned Names and Numbers (ICANN) contract. I also did not write or publish any material relating to this subject. Nonetheless, I am aware that the Department of Commerce chose to allow its contract with ICANN concerning the Internet Assigned Numbers Authority to expire on September 30, 2016.

I do not, however, believe that it is prudent or wise for the United States to sit back and disengage from this process. Too much is at stake. The United States must remain vigilant in order to ensure that essential ICANN functions are not at risk of transfer to another government or intergovernmental organization. To this end, I believe the Department of Commerce must periodically re-assess this transition in order to ensure that the principles of accountability, transparency, security, and stability of the Internet that informed the transition continue with management of ICANN duties today. I believe the Federal Communications Commission, to the extent useful for the Department of Commerce, could contribute to this review.

***Question 7. Microsoft and Facebook and YouTube, which is owned by Google, all of whom supported President Obama's Internet transition, have signed a code of conduct with the European Union to remove so-called hate speech from European countries in less than 24 hours. Do you think these global technology companies have a good record of protecting free speech? And what can be done to protect the First Amendment rights of American citizens?***

On June 1, 2016, the European Commission and four large technology companies—Facebook, Twitter, YouTube, and Microsoft—announced a code of conduct designed to counter online hate speech in Europe. These companies pledged to review the majority of requests for removal of certain hate speech in less than 24 hours. They also committed to remove or disable access to the content if necessary and to promote counternarratives to hate speech.

I appreciate the efforts by these private companies to reduce hateful conduct online. I also am aware that this code was put into place just months after terror attacks in Paris and Brussels. Nonetheless, I am concerned when United States companies with global presence operate in a manner at odds with our domestic free speech tradition. I believe it is appropriate to ask if commitment to this code implicates the First Amendment rights of American citizens. To answer this question in a comprehensive fashion, I believe a report reviewing this issue, and the implications of this code for American citizens, could be both timely and useful.

There is precedent for this approach. In 1993 the National Telecommunications and Information Administration at the Department of Commerce produced a report entitled “The Role of Telecommunications in Hate Crimes.” This report, which was directed by Congress, described the relationship between electronic communications media and hate speech. It included a

discussion of First Amendment principles—and their application to expressions of hate or bigotry. However, this report is dated. With so many communications platforms that have their origins in the United States now capable of global reach, the efforts of other jurisdictions to control and even dictate speech on these platforms is an issue that deserves careful attention and review. Should Congress direct the National Telecommunications and Information Administration to produce an updated version of its prior report, the Federal Communications Commission and Department of Justice should stand ready to assist.

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Written Questions for the Record from Senator Dan Sullivan for Jessica Rosenworcel

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**I want to thank you and the current FCC Commissioners for working with my staff to help alleviate some of the burden that the reduction in reimbursement from the Rural Health Care program placed on Alaskan health care providers.**

**In my state, the price of telecommunications services is so expensive that many rural health care providers cannot afford them without support from the Rural Health Care program. Telemedicine services in Alaska are essential for many of our villages, and they are only possible if a health facility has connectivity.**

**In enacting the Telecommunications Act of 1996, Congress specifically directed the FCC to ensure that rural health care providers have access to telecommunications services at rates that are reasonably comparable to those for similar services in urban areas of the State. As you are aware, for the first time the demand for funding from the Rural Health Care program exceeded the \$400 million cap.**

***Question 1.* Will you work to ensure the sustainability of the Rural Health Care Program as the FCC moves forward to review further reforms to universal service programs?**

Yes.

***Question 2.* If confirmed, what steps would you take to address this funding issue?**

I have seen first-hand village clinics in Alaska that use broadband to provide first-class care to patients in some of our most remote communities. So I know that telemedicine has a transformative power in rural areas. Moreover, I know that the provision of this kind of care is often dependent on support from the Commission's rural health care program.

The Commission's rural health care program was last substantially updated in 2012. In critical part, this modernization expanded the program from supporting rural health care providers with communications costs that exceed comparable service in urban areas to supporting broadband connectivity through health care networks. As a result of this effort, demand for the program has grown. To date, the Commission has managed this growth by pro-rating support, so that all applicants are subject to a uniform cut. I am not sure this is a sustainable approach. Consequently, if re-confirmed, I would support a rulemaking to reconsider prioritization in this program, which could, among other things, take into account how rural the area is where support is provided.

***Question 3.* Will you consider beginning a rulemaking proceeding to evaluate the changes necessary to ensure that the program budget is sufficient to fulfill the purposes of the program?**

Yes.

**It is my understanding that environmental assessments (EAs), when required under the FCC's rules, are currently not subject to any processing timelines or dispute resolution procedures. As a result, environmental assessments for new facilities can languish for an extended period of time—sometimes years. This is an unfortunate barrier to feeding our nation's hunger for expanded wireless broadband.**

**Given my seat on this committee and on EPW, I have a particular interest in finding ways to streamline these procedures.**

***Question 4.* Will you commit to finding ways to streamline the FCC's review of environmental assessments, including through the adoption of "shot clocks" to resolve environmental delays and disputes, in addition to working on additional infrastructure reforms?**

Yes. In light of the changing nature of wireless infrastructure, I think the Commission should streamline its siting policies, to the extent feasible under the National Environmental Policy Act. This law requires federal government agencies, including the Commission, to identify and evaluate the environmental impact of actions "significantly affecting the quality of the human environment." The Commission has an outstanding rulemaking concerning wireless infrastructure that, among other things, seeks comment on the policies it has adopted under this law. If re-confirmed, I pledge to carefully review the law and the record in order to update and modernize these policies.

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Written Questions for the Record from Senator Mike Lee for Jessica Rosenworcel

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***Question 1.* In recent years, there have been incredible technological advancements in telecommunication services that aid the deaf and hearing disabled. With respect to any future rulemaking – do you commit to ensuring that these technologies continue to be made available unencumbered by heavy handed regulation that could stifle innovation and impede access to these services?**

Yes. Under the Americans with Disabilities Act, functional equivalency has long been the foundation of Commission policies designed to provide access to modern communications services for the deaf and hearing disabled. While this may sound like regulatory lingo, for individuals with these disabilities it means the right and ability to pick up the phone, reach out and connect, and participate more fully in the world.

Pursuant to the Americans with Disabilities Act, the Commission has adopted telecommunications relay service policies that support a variety of technologies designed for the deaf and hearing disabled, including Video Relay Service and Internet Protocol Captioned Service. I believe the continued success of these programs depends on the Commission both ensuring fair compensation for providers of these services and taking action to prevent waste, fraud, and abuse. Moreover, I believe that as communication technologies advance, it is incumbent on the Commission to periodically reassess these programs in order to continue to honor both the spirit and substance of functional equivalency. If re-confirmed, I pledge to do so mindful of the need to prevent policies that stifle innovation and impede access to new services.

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Written Questions for the Record from Senator Ron Johnson for Jessica Rosenworcel

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***Question 1.* If confirmed, will you commit to looking at the costs and benefits of regulations and consider all of the economic data in the record?**

Yes.

***Question 2.* Are you aware that DHS is the sector specific agency for communications critical infrastructure and works with other agencies to enhance resiliency?**

Yes.

***Question 3.* Given the role of DHS, I am concerned that any further FCC action would be duplicative and overlapping. As Chairman of the Senate Committee on Homeland Security and Governmental Affairs, I have highlighted duplicative cyber regulations across the government and am working with my colleague to harmonize these regulations. If confirmed, will you commit to work with me on cyber harmonization and defer to assigned sector specific agencies when it comes to cybersecurity?**

Yes. I agree that effective efforts to manage cybersecurity risk require harmonization across government authorities.