Response to Written Questions Submitted by Hon. John Thune to Hon. Tom Wheeler

Question 1. On October 6, 2016, you circulated for the Commission's consideration a draft rule and order in the broadband privacy proceeding.

A. Have the commissioners or staff at the Federal Trade Commission (FTC) had an opportunity to read the text of the new draft rule?

B. If not, will the text of the new draft rule be shared with the FTC before the Commission votes on the new proposal, and will the FTC have sufficient time to meaningfully provide input on the new draft rule before the Commission votes?

C. If the Commission does not intend to share the text of the new draft rule with the FTC, please explain why.

Answer. The Commission's rulemaking process, which has been followed over the years by both Democratic and Republican Chairs, is designed to give stakeholders and members of the public ample opportunity to engage in a transparent and vigorous discussion. The process is also designed to give Commissioners a three-week period to discuss in confidence the substance of an item before final decisions are released. This process is commonplace for administrative agencies and allows the FCC to adhere to the Administrative Procedure Act, which requires us to consider and address all comments received on our proposals.

In following this standard process with all stakeholders alike, the Commission has not published the text of the new draft Broadband Privacy Order, nor have we shared it with the Federal Trade Commission (FTC). The FTC has, however, had significant opportunity to publicly provide constructive input on the broadband privacy proceeding and has indeed done so. Staff of the FTC's Bureau of Consumer Protection filed comments with the Commission on May 27, 2016. FTC Commissioner Ohlhausen filed separate comments on the same date. Further, we extended the reply comment deadline for the privacy proceeding, providing the public, including the FTC, with additional time to submit reply comments. Since the reply period closed, we have continued to engage stakeholders and other interested entities. Upon circulating the item to my fellow Commissioners, we published a fact sheet and a blog post describing the new draft Order to allow the public to understand and engage with us on the broadband privacy issues before the Commission. Following this release, FTC Chairwoman Edith Ramirez issued a supportive statement, saying, "I am pleased to see the FCC moving forward to protect the privacy of millions of broadband users across the country. The FTC ... provided formal comment to the FCC on the proposed rulemaking, and I believe that our input has helped strengthen this important initiative." The FTC, and other stakeholders, may continue to meaningfully provide the Commission with input on the publicly available information.

I can assure you that, as I stated last month at the Senate Commerce Committee's FCC Oversight Hearing, the FCC has had an ongoing dialogue with the FTC throughout the broadband privacy proceeding and has taken their comments seriously. Even though the FTC does not share jurisdiction with the FCC in this area, we are embracing many of their comments in our new draft Order. And as you may recall, at the Senate Commerce Committee's FTC Oversight

Hearing last month, FTC Chairwoman Ramirez confirmed that the FTC engages in regular conversations with the FCC, both at the staff level and more senior levels, to discuss the approach that the FTC takes when it comes to privacy. Chairwoman Ramirez further stated, "I do ... as you [Chairman Thune] already noted, do know that they [the FCC] take our comments very seriously."

Question 2. Recently, the FCC Inspector General (IG) completed his investigation into whether you authorized the disclosure of information about ongoing commissioner deliberations in advance of the March 31, 2016, open meeting. The IG found that you did indeed authorize the disclosure.

A. Do you agree with the IG's finding that you did indeed authorize a disclosure to *Politico* in advance of the March 31, 2016, open meeting?

Answer. I do not have a clear recollection of authorizing this specific disclosure of nonpublic information, but I do not dispute the testimony of my staff that I did so. As I explained to you in my May 2, 2016 response, my office sometimes decides to disclose nonpublic information when we think it will promote the discussion and understanding of important policy issues. As the IG report explains, on the morning of March 31, 2016 there was intense media interest in the timing and the content of the proposed Lifeline Order. The Director of the FCC's Office of Media Relations recommended that the Commission release high-level details about the Lifeline item to better inform the public of the item's status. I do not doubt that I accepted her recommendation, as I have done on other occasions when there is high public demand for information about the Commission's activities. As the IG Report explains, it has been the long-standing position of the FCC that section 19.735-203 gives the Chairman the authority "to change the character of information from previously non-public information to information that would be available for public disclosure."

B. Why did you previously refuse or decline to acknowledge that you had authorized the public disclosure of this information to *Politico*?

Answer. Your April 15, 2016 letter included allegations of improper conduct by Commission employees, including myself. In this situation, I was clearly disqualified from investigating your allegations, and pursuant to section 19.735-107(b) of the Commission's rules, I requested that the IG investigate them instead. In your April 15 letter, you also cited section 19.735-107(b) as authority for the opening of an IG investigation. I publicly promised to cooperate with the IG, and, as a potential subject of the investigation, I avoided taking any actions that might have had the appearance of interfering with or influencing the outcome of the investigation. I was not the only person who deferred to the IG's fact-finding process. At the hearing before the House Energy and Commerce Committee on July 12, 2016, for example, Chairman Walden announced that he would not ask questions about the disputed events of March 31 due to the pending IG investigation.

C. Rather than acknowledging your disclosure (or approval of the disclosure), why did you instead seek to discuss the disclosure of a fellow commissioner in your response to my April 15, 2016, letter?

Answer. In response to your question about my knowledge of whether I or other FCC employees disclosed nonpublic information, I simply pointed to already public reports that a commissioner's office had provided details about the Lifeline negotiations to outside parties. The IG's investigation identified a number of other instances in which commissioners' offices were communicating with media representatives prior to the Commission's open meeting on March 31.

D. The IG report states that you "planned to follow Commissioner Clyburn's lead on the compromise Lifeline Order" regarding how you would vote. Is this true?

Answer. The authors of this report make this statement based on information they learned in an interview with the FCC's Chief of Staff, Ruth Milkman, and on a contemporaneous e-mail she sent to other members of my staff. While I do not have a clear recollection of making this statement, it is consistent with the general approach since I have been Chairman of the Commission. Commissioner Clyburn is a skilled and passionate advocate for the Lifeline program and I look to her for policy leadership on Lifeline issues.

Question 3. Chairman Wheeler, in 2014, you said "there is a new regulatory paradigm" for cybersecurity characterized by reliance on private sector leadership and the market first, "while preserving other options if that approach is unsuccessful." You also noted that "[t]he pace of innovation on the Internet is much, much faster than the pace of a notice and comment rulemaking."

Similarly, the Administration has stressed the importance of public-private partnerships to enhance security, believing that static mandates cannot keep pace with growing and evolving cybersecurity threats and technological developments. Indeed, this approach, which the FCC's Communications Security, Reliability and Interoperability Council (CSRIC) has adopted, is helpful in tailoring guidance to small and mid-sized companies.

Despite the foregoing, this year the Commission has adopted security measures and reporting requirements in a series of orders and notices of proposed rulemaking on consumer privacy, communications network outage reporting, technology transitions, emergency alert systems, and 5G wireless licensing. Addressing cybersecurity in this manner through prescriptive rulemaking appears contrary to the Commission's professed desire to pursue the cooperative approach of an industry-led, public-private partnership.

A. Given the recent work of CSRIC IV, what is the reason for this apparent shift from industry-led, public private partnership to prescriptive rulemakings?

B. Has the Commission determined that a voluntary, market-based approach was unsuccessful?

Answer. The Commission continues to pursue the industry-led paradigm embraced within CSRIC IV. Rather than prescribing how service providers protect their systems, this paradigm lets service providers determine the security measures that are most appropriate and effective for their systems. We believe that providers are in the best position to assess their own risk and develop effective security measures to address that risk.

The Commission's work continues to focus on clear lines of accountability to address residual risk. We expect service providers to be proactive in securing their systems. This approach is consistent with the Commission's longstanding security policies that have relied on voluntary best practices, leveraging CSRIC recommendations and, coupled with outage reporting rules, that do not require that providers engineer or operate their networks in a particular manner.

Under this approach, the Commission must understand where providers have accepted cybersecurity risk. The reporting mechanisms recently adopted by the Commission accomplish this through a mechanism that is similar to how the Commission has tracked network outages for over a decade. This approach allows the Commission to identify reliability trends and work with industry to flag concerns without having to resort to prescriptive rules.

Question 4. It has been fifteen months since the FCC received comments on the "Cybersecurity Risk Management and Best Practices" report submitted by CSRIC IV. The report was unanimously adopted by CSRIC and includes segment-specific analysis to apply the Cybersecurity Framework, as well as recommendations in response to the Commission's charge.

A. What is the status of this proceeding and when will the Commission take action?

Answer. I circulated an item to my fellow Commissioners earlier this year that would implement CSRIC IV's recommendations. The item remains under consideration.

B. What action has the Commission taken under CSRIC or other contexts to examine vulnerabilities with regards to key communication protocols like Signaling System 7 and Diameter?

Answer. As communications technologies transition from legacy systems and networks to new all IP-networks, legacy technology is potentially vulnerable to new risks. SS7 is one such legacy protocol that is both nearing its end of life but still an essential part of the communications ecosystem. For this reason, earlier this year, the Commission tasked CSRIC to examine vulnerabilities associated with the SS7 protocol and other key legacy communications protocols. CSRIC established a working group to assess vulnerabilities and current defensive mechanisms related to these legacy communications protocols and to make recommendations to the FCC on solutions. After meeting with several communications security experts on the SS7 security issues, the group provided its initial risk assessment brief at its September meeting. The briefing highlighted the vulnerabilities inherent in SS7 in both the wireline and mobile environments, vulnerabilities associated with the interworking between SS7 and DIAMETER, and potential risk mitigation strategies. CSRIC will submit a final report with recommendations to the Commission in March of next year.

The FCC continues to scrutinize our numbering initiatives to identify how underlying SS7 vulnerabilities may increase risks. We are working with our federal government and communications sector partners to bring about meaningful solutions and risk mitigation strategies that will reduce risk from SS7 vulnerabilities consistent with the Commission's charge to ensure that communications networks are secure, reliable, and resilient.

Question 5. The CSRIC IV's "Cybersecurity Risk Management and Best Practices" report recommends that the FCC, in partnership with DHS, participate in voluntary meetings with communications sector stakeholders to review cybersecurity risk management practices.

A. Does the Commission still plan to conduct these voluntary meetings?

B. If so, how will the Commission ensure that it does not use information voluntarily shared for enforcement or rulemaking purposes?

Answer. Strong cybersecurity policies and protections are crucial to maintaining the reliability and resiliency of our commercial networks and public safety mechanisms. CSRIC IV proposed that the Commission use the DHS Protected Critical Infrastructure Information (PCII) program to ensure the strongest protection against disclosure of the information that would be received in assurance meetings. The Commission would prefer to employ the DHS PCII program, but in the interim the Commission is considering an item that would establish legally equivalent protections that could apply to such meetings at the Commission.

Question 6. A recent independent evaluation to determine the effectiveness of the Commission's information security program and practices for fiscal year 2015 determined the Commission was not in compliance with the Federal Information Security Modernization Act. The evaluation disturbingly found significant deficiencies in several security areas.

A. Will you commit to implement information security-related recommendations from the IG and independent auditors fully and in a timely manner?

B. Will you please provide the Committee with regular updates on your progress to implement these recommendations?

Answer. The FCC commits to implementing information security related recommendations from its Inspector General and independent auditors fully and in a timely manner. Furthermore, the FCC will provide the Committee with regular updates on its progress to implement these recommendations. We would be glad to work with the Committee staff to establish a recurring process that fits your needs.

Question 7. Please provide a copy of the Commission's document retention policies. Please include details on the Commission's retention of e-mail messages and voicemail messages and the Commission's process for searching e-mail and voicemail in response to Freedom of Information Act requests or other requests.

Answer. The Commission's document retention policies for federal records are reflected in its records retention schedules. All retention schedules are approved by the National Archives and Records Administration (NARA), taking the form of either a General Records Schedule developed by NARA and adopted by the FCC, or an FCC-developed schedule approved by NARA. All of the General Records Schedules are available on NARA's website at https://www.archives.gov/records-mgmt/grs.html. Furthermore, the FCC specific schedules are also available on NARA's website at the following link: https://www.archives.gov/records-mgmt/rcs/schedules/index.html?dir=/independent-agencies/rg-0173. In addition, the

Commission would be happy to provide committee staff with the Commission's internal directive that describes the overall process that the FCC uses for record management, including coordination with NARA and roles and responsibilities within the FCC.

These schedules specify the duration for which records must be stored. E-mails and voicemails are generally considered records under federal records laws. Currently, there is no specific records schedule for e-mail and voicemail messages. However, consistent with OMB's Managing Government Records directive (OMB Memorandum M-12-18) and NARA guidance (NARA Bulletins 2013-02—Guidance on a New Approach to Managing E-mail Records, and 2014-06—Guidance on Managing E-mail), the Commission is in the process of developing a records schedule that would specifically cover e-mails. Among other things, this new schedule would generally require that the e-mails of high-level officials be treated as permanent records.

Prior to August 2015, unless otherwise required under our records schedules, the Commission retained e-mail and voicemail messages according to administrative need. The Commission's retention policy for e-mail messages was to keep all messages available on staff e-mail accounts for 45 days. At the completion of 45 days, messages would be held in a user's "Deleted Items" folder for ten additional days. After that time, messages would be automatically deleted from the user's e-mail account. FCC employees who needed to retain an e-mail message for business purposes longer than 45 days could move the message to an archive folder where it would be retained indefinitely. The policy for retaining voicemail messages was the same as for e-mail messages, as the Commission's e-mail platform (Microsoft Exchange) maintained a user's voicemail messages in their e-mail account. The 45-day retention policy was put in place to meet users' needs and to prudently manage electronic storage of messages based on limited electronic storage space.

Beginning in August 2015, the FCC moved to a cloud-based solution for e-mail messages, Office 365, greatly increasing the available electronic storage for e-mail and voicemail. At that time, the agency decided to retain all e-mail messages that are potentially federal records that were sent or received since August 2015, pending the adoption of the new e-mail records schedule.

With respect to searches, the agency conducts all FOIA searches consistent with the requirements of the FOIA, *i.e.,* one that is "reasonably calculated to uncover all relevant documents." Upon receipt of a FOIA request, Commission FOIA personnel contact any Commission staff likely to possess records responsive to the request. These staff perform a search of their own records for any responsive material. The staff then provide copies of those responsive records to the FOIA personnel for processing and release. On a case-by-case basis, the agency determines whether additional searches are necessary to meet FOIA's requirements. The agency uses a similar process to respond to Congressional and litigation-related searches.

Question 8. As part of the Spectrum Frontiers Order, the FCC made available nearly 11 GHz of spectrum, but less than 4 GHz of that will be made available on a licensed basis. And a portion of that licensed spectrum will be allocated on a shared basis.

A. I believe that there should be a balance between licensed and unlicensed spectrum. Does this Order strike the proper balance? If so, please explain why.

Answer. Opening up spectrum and offering flexibility to operators and innovators is the most important thing we can do to enable the 5G revolution, and I share your view that there should be a balance between licensed and unlicensed spectrum. I have consistently pursued spectrum policies that take an "all of the above" approach—making more spectrum available for licensed, shared, and unlicensed access. In the Spectrum Frontiers Order, we increased the amount of licensed spectrum available by over four times what is currently available. We made a small portion available on a shared basis, and 7 gigahertz available on an unlicensed basis. Importantly, there are unique physical properties of the unlicensed band that makes it best suited for unlicensed access. Specifically, the spectrum in the 60 gigahertz range is not able to travel long distances—the atmosphere absorbs and dissipates the signal beyond a few meters. It therefore is very effective for short range, high data applications, and does not lend itself to a traditional wide-area geographic licensing approach. This spectrum will serve as a breeding ground for new innovations, and I believe will help drive economic activity in the U.S. as a complement to the licensed spectrum we made available.

As the Commission looks to open up additional spectrum bands, including an additional 18 gigahertz that the Commission proposed to make available on a licensed basis through the Spectrum Frontiers FNPRM, it will continue to pursue this balanced approach, while at the same time taking into account the unique circumstances in each spectrum band.

B. Should the Commission look for more licensed spectrum as it considers additional high frequency bands in its further notice?

Answer. As the demand for wireless technologies increases, so does the need for greater coverage and wireless network capacity. To keep up with the growing demand the Commission is pursuing an "all of the above" policy, and licensed spectrum will play an integral role in future spectrum bands. As described above, the Commission will continue to pursue a balanced approach to spectrum policy, while at the same time examining the unique circumstances in each spectrum band. The Further Notice of Proposed Rulemaking that was adopted contemporaneously with the Report and Order seeks comment on making an additional 18 gigahertz of licensed spectrum available, on top of the 3.85 gigahertz made available in the Report and Order.

Question 9. The 18th Mobile Wireless Competition Report states, "Given the complexity of the various inter-related segments and services within the mobile wireless ecosystem, any single conclusion regarding the effectiveness of competition would be incomplete and possibly misleading in light of the complexities we observe."

A. If the Commission is unable to accurately assess overall competition within the mobile wireless ecosystem given these "complexities," how can it reasonably conclude that its regulatory actions, undertaken in the absence of an overarching conclusion regarding the ecosystem's state of competition, are in the public interest?

B. If the Commission is able to assess overall competition within the ecosystem, why has it repeatedly failed to make such an assessment and finding?

Answer. Similar to the first seven Reports and the five most recent Reports, the 19th Mobile Wireless Competition Report (19th Report), released on September 23, 2016, provides extensive data and analysis of competition in the mobile wireless marketplace and does not make a finding that there is or is not effective competition in the marketplace. First, as explained in the 19th Report, the mobile wireless ecosystem is sufficiently complex and multi-faceted that it would not be meaningful to try to make a single, all-inclusive finding regarding effective competition that adequately encompasses the level of competition in the various interrelated segments, types of services, and vast geographic areas of the mobile wireless industry. In addition, there are significant variations in size, market share, spectrum holdings, investment, and other indicators between the top two mobile wireless providers and the next two nationwide wireless providers. The extent of these variations makes a broad, singular determination of how competitive the overall mobile wireless marketplace is unhelpful in the application of careful and empirically driven regulatory oversight.

Furthermore, as the 19th Report and previous Reports note, there is no agreed upon definition of "effective competition." However, this does not preclude the Commission's ability to make determinations as to the public interest benefits of particular Commission actions, which address discrete issues, or specific facets of the mobile wireless marketplace. Those actions follow notice and comment rulemaking processes that allow for an extensive public record addressing the particular matter at hand.

Question 10. The Commission's Mobile Competition Reports have repeatedly claimed that Form 477 data are subject to "methodological limitations" and have "the potential to overstate coverage." What steps is the Commission taking to ensure it has adequate information to properly assess whether or not the Commercial Mobile Radio Services marketplace is effectively competitive? Please describe in detail what activity there has been in each of the past three years.

Answer. The Competition Report historically has used data from third-party sources such as Mosaik because the Commission did not have adequate data sourced internally. However, in recent years, the Commission has increasingly used Form 477 data. The Commission used Form 477 data in its last two Competition Reports (the 18th Report and the 19th Report), but did not use Form 477 data in its 17th Competition Report, released December 8, 2014. Form 477 data are collected using standards and methodologies specified by the Commission. The data are provided, and certified as accurate, by the service providers directly to the Commission, and not to a third-party entity like Mosaik. However, Form 477 data, as well as that from third-parties, are potentially subject to errors or overstatements by the providers themselves. The Commission recognizes the importance of accurate information to our policymaking and enforcement, as well as to consumers, and is exploring ways to ensure the accuracy of these data.

Further, another limitation has been the centroid methodology used to determine whether a census block is considered "covered." Under the centroid methodology, if the geometric center

point, or centroid, of a census block is within the boundary of a provider's coverage map, that block is considered to be "covered" even if significant portions of the census block may be outside of any provider's coverage. In addition, coverage estimates based on the centroid methodology represent deployment of mobile networks and do not indicate the extent to which service providers affirmatively offer service to residents in the covered areas, and thus likely overstate the coverage experienced by some consumers. In the 19th Report, for the first time, the Commission also reports coverage based on the actual area coverage methodology, which calculates the exact area of a census block reported as covered by each service provider by technology, and yields more precise estimates.

Finally, while coverage data is most useful as a necessary tool for measuring and understanding developments in mobile coverage year over year, it is just one element of competition between service providers in the mobile wireless marketplace. As noted in the answer to Question 9 above, the mobile wireless ecosystem is sufficiently complex and multi-faceted that it would not be meaningful to try to make a single, all-inclusive finding regarding effective competition. In addition, there is no agreed upon definition of "effective competition."

Please be assured that the Commission therefore continually evaluates its current data sources and methodologies, and strives to find new data sources and develop new methodologies, in order to improve the quality and reliability of the data provided in the Competition Report. Stakeholders are requested to comment on such matters, as well as provide information and data, which the Commission takes into account in its preparation of each edition of the report.

Question 11. In the 2016 Broadband Progress Report, the Commission asserts that, "the availability of advanced telecommunications capability requires access to both fixed and mobile services." This is in direct contradiction to 47 U.S.C. Sec 706(d), which defines "advanced telecommunications capability … *without regard to any transmission media or technology*, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications *using any technology*" (emphasis added). Please explain how the Commission determined that both fixed *and* mobile services were required by the statute. Please include any legislative history supporting the Commission's interpretation.

Answer. In the 2016 Broadband Progress Report, the Commission determined that the availability of advanced telecommunications capability in today's communications landscape requires access to both fixed and mobile broadband services, not because the services use different network technologies, but because they offer distinct and complementary functions or capabilities to consumers. As noted in the Report, consumers use fixed broadband service for high-capacity home use, including streaming high-definition video, uploading large files, and certain web services, but also increasingly rely on mobile broadband services for activities like navigation, communicating with family and friends and on social media, and receiving timely news and information when away from home. Mobile usage represents about 62 percent of American time spent on a computing device, and 67 percent of smartphone owners use their phone for navigation and direction. Fixed and mobile broadband services are both critical means by which Americans communicate, and both should be evaluated in our analysis. Thus, as part

of this inquiry, the Commission took the common-sense step of including mobile broadband services in the assessment of advanced telecommunications capability.

Question 12. Stakeholders have expressed serious concerns that your business data services (BDS) proposal could further exacerbate the challenges of providing residential broadband services in rural areas. They argue your proposal would further disincentivize investment in the infrastructure needed to provide broadband services to rural customers.

A. Do you share these concerns about the BDS proposal?

Answer. Business data services (BDS) play an important role in the day-to-day life of consumers, business, and industry, and are integral to the competitiveness of the U.S. economy as a whole in the information age. My goal is to maximize the benefits of business data services for U.S. consumers and businesses, especially those in rural areas. I fully agree that maintaining incentives to invest—both by BDS providers and by their customers—is paramount. Let me assure you that we have continued to take the views of all stakeholders into consideration as we work to complete BDS reform. The proposal I have circulated to my fellow Commissioners recognizes the real challenges faced in rural areas and strikes a balance that addresses the problems in this market while maintaining incentives for investment by BDS providers.

B. If not, please describe, in detail, why you think your plan is sound policy for our nation's rural communities and the overall growth of our nation's Internet infrastructure.

Answer. Earlier this year we sought broad public comment on reforming and modernizing the existing, fragmented regulatory BDS structure with a new framework. It is worth noting that the reform being considered is focused on areas served by incumbent LECs regulated pursuant to price cap regulation, not the rural areas served by rate-of-return LECs. In early October, I circulated to my fellow Commissioners proposed rules to reform the regulatory regime for BDS to promote fairness, competition, and network investment in this important marketplace. The circulated Order provides a new framework that strikes a balance between targeted regulation for lower-bandwidth legacy services, where evidence of market power is strongest, and lighter-touch regulation for packet-based services, where there has been new entry and competition may be emerging. The proposed Order is grounded in the comprehensive record of this proceeding, including careful review of the sophisticated economic analyses presented by multiple parties as well as other record evidence. As we work to achieve these important goals, we take into careful consideration the impacts various forms of regulation would have in the markets that utilize BDS, and we also pay particular attention to impacts any potential regulations may have in rural areas.

Question 13. The Commission has proposed an exception to the local media cross-ownership ban that would allow a broadcaster to invest in a newspaper when it is "failing." This exception for cases in which a newspaper is "failing" renders little value to a newspaper that needs investments now, well before it is "failing." By the time a newspaper is "failing," a local broadcaster may no longer see it as a worthwhile investment – particularly in light of the consumer trend toward digital and mobile applications for news and entertainment. Shouldn't

the Commission be seeking ways to encourage investment in newspapers *before* they get to a state of "failing," and before such newspapers may have to make the difficult decision to cut back on local reporting resources?

Question 14. Thanks to the Internet and other digital platforms, consumers today have available to them a nearly endless variety of sources of information, even while some of those outlets find it increasingly difficult to find the scale to compete in the new media landscape. In light of dramatic and transformative changes in the 41 years since the cross-ownership ban was adopted, why should newspapers, alone among all media providers in an Internet Age, be singled out and generally disqualified from being co-owned with even a single television or radio station in their local markets?

Response (Questions 13 and 14): The media ownership rules adopted in the recently concluded proceeding were based on a comprehensive, refreshed record that reflects the most current evidence regarding the media marketplace. With respect to the Newspaper/Broadcast Cross-Ownership (NBCO) Rule, the record demonstrates the continuing role of newspapers and broadcast stations as the primary producers of original local news and public interest programming. Accordingly, the Commission concluded that regulation of newspaper/broadcast cross-ownership within a local market remains necessary to protect and promote viewpoint diversity.

With that said, the Commission did revise the NBCO Rule to provide for a modest loosening of the previous ban on cross-ownership. The modifications include: (1) modifying the rule to update its analog parameters to reflect the transition to digital television; (2) in order to focus the application of the rule more precisely on the areas served by broadcast stations and newspapers, revising the trigger of the NBCO Rule to consider both the contour of the television or radio station involved, and whether the station and the newspaper are located in the same Nielsen DMA or Audio Market (if any); (3) in recognition of the fact that a proposed merger involving a failed or failing entity does not present a significant risk to viewpoint diversity, adopting an explicit exception to the NBCO Rule for proposed mergers involving a failed or failing broadcast station or newspaper; and (4) considering requests for waiver of the NBCO Rule on a case-by-case basis and granting relief from the rule if the applicants can show that the proposed merger will not unduly harm viewpoint diversity in the market.

The "failed or failing entity" provision is only one exception and the revised rule explicitly provides for waiver requests on a case-by-case basis. Thus, an entity may seek investment before it is "failing," as long as viewpoint diversity is not unduly harmed by the merger.

Question 15. Chairman Wheeler, in March of this year, I publicly asked you whether you would resign from the FCC at the end of President Obama's term, but you did not provide a clear response at that time. Since then, however, you have privately assured me you would indeed resign after the election. Will you now publicly commit to resigning from the FCC at the end of President Obama's term, unless explicitly asked to stay on by the next president?

Answer. As I said during our private conversation and at the September Senate Commerce Committee Oversight Hearing, I will cooperate fully with the new administration to assure a smooth transition at the FCC.

Response to Written Questions Submitted by Hon. Roger Wicker to Hon. Tom Wheeler

Question 1. Regarding the USF reform order for small, rate-of-return carriers earlier this year, you've already committed to work with Congress and affected stakeholders to promptly address any adverse or unintended consequences that arise out of the reforms. We want to talk about one issue that has come to light –we understand that the record in the proceeding shows that, even with the new standalone broadband support mechanism, most small carriers still will be forced to offer broadband-only service at prices far in excess of what's available in urban areas. This runs directly counter to the Communications Act's promise of reasonably comparable services and rates.

A. What steps will the FCC take to streamline and expedite its waiver process to ensure that the broad major reforms to USF support that the FCC adopted for rate of return carriers can be tailored to meet individual carrier realities?

Answer. In the *USF/ICC Transformation Order*, the Commission recognized that some carriers impacted as a result of reform might need a waiver exempting them from some or all reforms. To assist potential applicants in effectively formulating their waiver petitions, the Commission provided guidance on the circumstances that would be persuasive and compelling grounds for grant of a waiver under the Commission's ordinary standard for granting waivers under section 1.3 of the Commission's rules. The Commission provided further clarification and guidance in response to a subsequent petition from several rural associations. To date, the Commission has addressed petitions seeking waiver of support reductions for about a dozen carriers, with two more recently filed petitions still pending. The Commission has not received any petitions for waiver of the reasonable comparability requirement from carriers since the March 2016 *Rate-of-Return Reform Order*.

B. How do you plan to make sure ultimately that rural consumers are paying reasonably comparable rates to urban consumers regardless of whether its voice or broadband they want? How can you ask carriers to certify that their broadband rates are reasonably comparable to those in urban areas when the record clearly shows that many won't get enough support to offer that?

Answer. The *Rate-of-Return Reform Order* adopted by the Commission was the result of a bipartisan effort, aided by the rate-of-return carriers themselves, to expand rural broadband deployment by modernizing the USF high-cost support program for rate-of-return carriers, including by providing support for standalone broadband.

As a condition of receiving high-cost support, the Commission requires carriers to offer voice and broadband services in supported areas at rates that are reasonably comparable to rates for similar services in urban areas. We annually survey urban rates and recipients of high-cost support are required to report annually whether their rates are reasonably comparable to those urban rates. Based on the Commission's most recent survey, the benchmark in 2016 for broadband service of 10 Megabits per second (Mbps) downstream and 1 Mbps upstream and a 150 Gigabytes (GB) per month usage allowance was $71.17. Carriers must certify annually that

they are in compliance with that benchmark, and the Commission has stated it will deal with carriers that are not able to make that certification on a case-by-case basis.

In the December 2014 *Connect America Order*, the Commission stated that it will gather more information if eligible telecommunications carriers (ETCs) are unable to make the reasonable comparability certification for their broadband rates. ETCs may present factual evidence explaining the unique circumstances that preclude them from offering service at a rate meeting the requisite benchmark. As we continue to implement the rate-of-return reforms we put in place earlier this year, including providing support for standalone broadband, we will continue to monitor consumer broadband-only rates to ensure that our policies support reasonable comparability.

Question 2. Carriers need to let the FCC know in the next few months if they want to elect a new cost model for USF support on a voluntary basis or continue to receive support through a modified version of the system that was in place before. But we understand that information regarding several aspects of the reforms – such as budget controls and buildout duties and the effects of certain caps – haven't been made public yet.

A. How can carriers make informed choices about what option is right for them without such information? Will you commit to giving carriers complete information about both the model and the other changes to the current support systems so that they can make informed decisions before they need to make their final choice?

Answer. The Commission provided detailed information about both the model and the impact of reforms for those who do not select the model in advance of the November 1, 2016 deadline for electing the model. In August, the Wireline Competition Bureau (WCB) released the model support amounts offered to rate-of-return carriers. These amounts were announced by a Public Notice and were accompanied by a spreadsheet detailing the offer, as well as a map and a list of census blocks showing areas that would be funded by carriers accepting the offer.

The Commission also made available information regarding the operating expenses limitation, capital investment allowance, extent of incumbent carrier broadband coverage (which is used to calculate several aspects of other reforms), extent of competitive overlap, deployment obligations for carriers remaining on legacy mechanisms, transition payments for carriers that would receive less support if they elect to receive model support, and the operation of the budget control mechanism for the first half of 2017. In addition, on October 6, 2016, Commission staff and USAC held a webinar to answer the industry's questions. Also on October 6, 2016, WCB released an order regarding tariff revisions that must be made before carriers may receive universal service support for standalone broadband starting January 1, 2017. All of this information, and more, is available on USAC's website: http://www.usac.org/hc/rules-and-orders/rate-of-return-reform-order.aspx.

B. We also understand that depending on how the model election is conducted, that could lead to carriers that did NOT elect the model being harmed and getting less funding. How is that fair or reasonable? Why are carriers who did nothing and

changed nothing in how they do business going to get less support due to the election choices of a few companies? Can we count on you to make sure this does not happen?

Answer. In 2011, the Commission allocated $2 billion of the total high-cost budget to support for rate-of-return carriers. The *Rate-of-Return Reform Order* did not alter that amount, but did make available to carriers a voluntary path to model-based support as well as adopt certain reforms to the legacy support mechanisms. Given the benefits and certainty of the model, the Commission did allocate an additional $1.5 billion over the10-year term to facilitate the voluntary path to the model. Carriers that choose to continue receiving support from the reformed legacy mechanisms will still receive support based on their own costs, but will be subject to budgetary controls to ensure efficient use of our finite federal universal service resources.

The deadline for carriers to make this decision was November 1. On November 2, the Wireline Bureau released a Public Notice announcing that 216 rate-of-return carriers elected the model and soliciting feedback on what measures should be considered to address the high level of interest in model-based support.

Question 3. Your recent Order provides for companies to elect to receive their future support through your Model or to continue to receive support through the modified Legacy mechanisms. However, rather than allowing each company to make that decision independently, you've required all companies within a single State and owned by the same holding company to make the same election. That is, all of these companies must elect to be supported under a modified Legacy model or under the new Model support system. So, all companies within a single State and owned by the same holding company must make that decision as a whole regardless of the differences between the companies, while two companies owned by the same holding company and only a few miles apart, but across state lines from each other, may elect separately to take Model support or Legacy support.

A. What was the rationale in the election process for the FCC to aggregate all companies owned by a holding company within a single State, even if those companies within that State may be hundreds of miles apart and very different from each other when it did not aggregate those companies owned by the same holding company that may be in differing States, but very similar and only a short distance from each other?

Answer. The Commission adopted its proposal to require participating carriers to make a state-level election, which was generally supported in the record. The Commission did not require carriers to make elections across state boundaries as rural incumbent carriers are designated as eligible telecommunications carriers on a state-by-state basis by the state commissions.

B. How does this further the ultimate goal of Telecommunications Act – affordable, comparable Universal Service available to all?

Answer. Requiring carriers to make a state-level election prevents rate-of-return carriers from cherry-picking the study areas in a state where model support is greater than legacy support, and

retaining legacy support in those study areas where legacy support is greater. Requiring carriers with multiple study areas in a state to make a state-level election facilitates decisions about managing different operating companies on a more consolidated basis.

Question 4. What is the timetable for the FCC to begin its CAF Phase II reverse auction and CAF Phase II Mobility Fund?

Answer. The Commission has not established dates for the CAF Phase II Auction or the Mobility Fund Phase II (MF-II) Auction.

The May 2016 Commission Order & FNPRM established a framework for the CAF Phase II competitive bidding process that will allocate more than $2 billion over the next decade in support for rural broadband, but important details regarding the operation of the auction remain to be decided. Many of these details will be determined in a forthcoming Auction Procedures Public Notice.

The Commission will consider the Mobility Fund Phase II Order at our November Open Meeting. Our recently-completed analysis of Form 477 data shows that there are significant gaps in 4G LTE coverage throughout the country that need to be addressed through MF-II. The primary focus of MF-II will be targeting our necessarily limited universal service funds to promote 4G LTE service in areas where it might not otherwise be expanded or sustained without federal support.

Question 5. You mentioned during the hearing that the FCC continues to struggle with gathering credible data regarding wireless coverage in rural areas. My colleague, Senator Manchin, has proposed a number of potential methods for gathering "real-world" measurements of rural coverage, including studying the feasibility of coverage drive testing through the United States Postal Service, commercial entities, and any other appropriate means. Has the FCC considered employing any of these or other methods of measuring rural wireless coverage? Can you assure my colleagues and I that the FCC will not proceed with any reductions to existing rural wireless USF support mechanisms until it can reliably gather data about actual wireless coverage throughout rural America?

Answer. In the past, the Commission has confronted several challenges in our attempts to measure mobile coverage in a way that matches up with the public's real-world experiences. A very significant challenge has involved the process of data collection. For the past several years, the Commission relied on data that came from states via the National Telecommunications Information Administration—data that was used in the National Broadband Map—and third party commercial vendors. For a variety of reasons, the data collected by the states and third party commercial vendors did not always reflect the real world experiences of consumers.

Recognizing the need to improve our mobile coverage data, the Commission adopted an order in 2013 that required mobile wireless data collection from one of the most reliable sources available—the mobile wireless carriers themselves. As a result the Commission is now collecting coverage data directly from wireless carriers through the Commission's Form 477. Each carrier that submits data must certify to its accuracy. We expect the data wireless carriers

provide through these submissions will be more accurate than our previous data because it comes directly from the entity that is deploying the wireless facilities. Commission staff have actively been analyzing the new coverage data from wireless carriers through the revised FCC Form 477, and recently released a detailed analysis of the December 2015 data (along with its methodology and the raw data on which it is based) so that stakeholders can make their own assessments regarding the reliability of the carriers' filings. In addition, in the context of providing for ongoing support for mobile broadband service, we intend to provide a process to consider stakeholders' challenges to ensure accurate decisions on the eligibility of particular areas.

I believe that all these steps substantially advance the Commission's ability to address the inherently difficult task, given the very nature of wireless networks, of accurately measuring mobile broadband coverage throughout the country. The Commission remains open as well to working with stakeholders regarding additional data sources, including new third party sources, and specific methods that we can employ to obtain more reliable information on mobile broadband coverage.

A core principle of universal service reform is that finite dollars should be distributed in an efficient, cost-effective manner that focuses funding on areas where service would be unavailable absent federal support. As such, USF support should not go to areas that are served by an unsubsidized provider. So MF-II will seek to target ongoing support as much as possible to areas that lack unsubsidized 4G LTE coverage. Overall, MF-II will therefore both preserve existing service where necessary and provide substantial support for further expansion of 4G LTE in areas where it is not currently available.

Question 6. What impact do you anticipate the FCC's proposed changes to existing rural wireless USF support mechanisms might have on critical services, like remote patient monitoring and precision agriculture applications, that rely on USF-supported wireless networks to function today? Can you assure me that the changes to wireless USF support mechanisms you are considering will do no harm to these existing services?

Answer. The Commission's recently-completed analysis of Form 477 data shows that there are significant gaps in 4G LTE coverage throughout the country that need to be addressed through MF-II. The primary focus of MF-II will be targeting finite universal service funds to promote 4G LTE service in areas where it might not otherwise be expanded or sustained without federal support. With that goal in mind, the Commission is working to address the key structural and operational issues for a MF-II fund, including the appropriate budget, eligible geographic areas, proper distribution methodology, and the public interest obligations of support recipients. MF-II will also make targeted support available to current competitive eligible telecommunications carrier (CETC) support recipients where needed to ensure preservation of existing service.

Question 7. In consideration of potential changes to wireless USF support mechanisms and rural coverage data, have you or your staff considered differences in coverage in rural areas by providers utilizing incompatible technologies? What impact does this have on seamless service availability for rural Americans?

Answer. In recent years, the Commission has taken steps to ensure interoperability among mobile networks. The Commission has adopted rules to enable consumers, especially in rural areas, to enjoy the benefits of greater competition and more choices, and encourage efficient use of spectrum, investment, job creation, and the development of innovative mobile services and equipment. These changes mirrored a voluntary industry solution to remove the lack of interoperability in the 700 MHz band while allowing flexibility in responding to evolving consumer needs and technological developments. The FCC also adopted basic device interoperability requirements in the AWS-3 and the 600 MHz service rules. Interoperability requirements in these bands will promote better, more seamless service, while allowing for the industry to continue to innovate, to the benefit of consumers across the country—in rural and urban areas alike.

With regard to providing universal service funding for the mobile broadband networks of the future, I believe that the priority needs to be to close the remaining 4G LTE coverage gaps existing in rural area as much as possible, rather than ensuring that such future networks are backwards compatible with network technologies that will be in the process of being phased out. I do believe that the proposed transitional phase down of current support will help address this issue in the interim.

The Commission is also considering a notice of proposed rulemaking that would classify VoLTE as a Title II service and unify the voice and data roaming standards, which actions together aim to provide all consumers, including rural consumers, with seamless access to service in all areas of the country, regardless of provider and regardless of how a particular voice call is delivered.

Question 8. Proposed broadband privacy rules suggest creating a new category of confidential information that reaches far beyond the type of information that is protected in the telephone environment, including a customer's name, postal address, and telephone number.

A. Can the Commission explain why it proposes to require ISPs to protect information that is available in a telephone or on-line directory?

Answer. The Commission's recently adopted privacy rules apply to customer proprietary information, a category that includes personally identifiable information (PII). The protection of PII is at the heart of most privacy regimes, including the FTC's enforcement-based work under Section 5 of the FTC Act. Names, postal addresses, and telephone numbers are quintessential PII—each of these can readily be used to identify an individual person.

Of course, not all PII is equally sensitive. People routinely introduce themselves to strangers but tend to carefully guard their Social Security numbers. The privacy rules take this difference into account by tying customer approval requirements for the use and disclosure of customer data to the sensitivity of the data. While use or sharing of sensitive customer proprietary information requires affirmative "opt-in" consent, an ongoing ability to "opt-out" is sufficient for non-sensitive data—such as basic contact information. That is, ISPs can generally use and share their customers' names, addresses, and telephone numbers under our rules unless and until a customer exercises the right to opt-out of that activity. The new rules also permit ISPs and other telecommunications carriers to use this and other non-sensitive customer information to market

additional communications services commonly bundled together with the subscriber's telecommunications service. This approach preserves reasonable customer expectations while minimizing burdens on providers.

B. Has the Commission considered only applying any new CPNI rules to only that information that ISPs hold uniquely in their role of providing telecom services?

C. If not, why not?

Answer. The Commission's recently adopted privacy rules reflect ISPs' unique role as "gatekeepers" in the Internet ecosystem. An ISP handles all network traffic, which means it has an unobstructed view of all of unencrypted online activity (such as webpages visited, applications used, and the times and date of Internet activity). On a mobile device, an ISP can track the physical and online activities throughout the day in real time. Even when data is encrypted, an ISP can still see the websites that a customer visits, how often they visit them, and the amount of time they spend on each website. Using this information, they can piece together enormous amounts of information about an individual—including private information such as a chronic medical condition or financial problems.

To be absolutely clear, the rules apply only to information that an ISP obtains by virtue of its role of providing service to its customers as a telecommunications carrier. The rules do not apply to information an ISP may obtain through its operation of an edge service, such as a music streaming app. Nor do the rules apply to information an ISP purchases on the open market.

Question 9. The Commission offers a laundry list of data to which ISPs ostensibly have access, and which the Commission proposes should be protected under a standard of strict liability.

A. Can the Commission explain why ISPs should be held to a stricter standard than application and edge providers that have access to the same data points?

Answer. In our final rules we adopt a standard that requires each ISP to take reasonable measures to secure the customer data it collects and possesses. What is reasonable for a given provider will depend on contextual factors, including the size of the provider, the nature and scope of its activities, and technical feasibility. We do not specify the particular measures a provider must undertake to meet its data security obligation, but we offer a list of "exemplary practices" as guidance. This context-based, "reasonableness" approach is consistent with the approach the FTC has taken in its enforcement work and with other privacy regimes.

B. Does the Commission have any plans to address consumer confusion that may well arise from the disparate way in which different actors in the broadband ecosphere are treated?

Answer. The Commission recently adopted privacy rules to implement Section 222 of the Communications Act, which requires telecommunications carriers to protect the confidentiality of their customer's proprietary information. As those rules become effective, we will work with all stakeholders to educate consumers, as well as their ISPs, about ISP obligations and customer rights pursuant to those rules.

The rules reflect ISPs' unique role as "gatekeepers" in the Internet ecosystem, which gives them comprehensive visibility into their customers' online lives. In this regard they are distinguished from even the largest edge providers. Moreover, the Commission's rules are grounded in statutory authority—including Section 222 of the Communications Act—that applies to ISPs but not to edge providers or other Internet ecosystem participants.

That said, the Commission's rules were not drafted on a blank slate. The rules incorporate the teachings of many well-established privacy and data security frameworks, including the Fair Information Practice Principles (FIPPs), the NIST Cybersecurity Framework, FTC precedent and best practices guidance, and state law. In addition, these rules are the culmination of an extensive public process in which FTC staff, ISPs, edge providers, digital advertisers, state governments, academics, consumer advocacy groups, and other stakeholders provided input and debated one another's ideas. Through this process, the key issues in this proceeding were sharpened, leading us to refine and improve upon our original proposals.

C. Would the Commission propose that application and edge providers that are not within the purview of FCC jurisdiction be regulated similarly?

Answer. As I have repeatedly said, edge providers are outside the scope of this rulemaking. The FTC has a strong track record of ensuring that edge providers protect consumer privacy under their Section 5 authority, and I would defer to the FTC's opinion on how application and edge providers outside of the FCC's jurisdiction should be regulated.

Response to Written Questions Submitted by Hon. Roy Blunt to Hon. Tom Wheeler

Question 1. As the Chairman of the Senate Rules Committee, I oversee the Copyright Office, which is the entity designated by Congress to interpret the nation's copyright laws.

On August 3rd, the Copyright Office wrote a letter highly critical of your initial proposal in proceeding MB Docket No. 16-42 because it violated copyright law, and violated the Constitution.

If I ask the Copyright Office for its views on your new proposal, are they going to say that this proposal is legal under copyright laws?

Answer. I think it is important to note that while Section 701(b) of the Copyright Act authorizes the United States Copyright Office (USCO) to "advise" Congress on copyright matters and "provide information and assistance" to other federal agencies, only federal courts have the power to authoritatively interpret copyright laws.

The USCO and other parties representing content owners expressed concern that the "three information flows" approach we proposed in the NPRM would allow third parties to interfere with the licensing agreements that programmers negotiate with multichannel video distributors (MVPDs). In response to these concerns, the Order on circulation employs an "apps-based" approach to the delivery of MVPD programming. Under this approach, which both the MVPDs and programmers supported during the rulemaking, all MVPD content will be delivered to consumers through an MVPD-controlled software application, ensuring that copyright protections and the terms of programming license agreements remain in place. I cannot speak for the Copyright Office's view on this revised approach.

Question 2. The Copyright Office plainly states the law affords copyright owners – in this case TV show producers – the "sole right to license" the use of their work, as well as the right to impose conditions on such use under the license.

Under what authority can the FCC usurp the law codified under Title 17 of United States Code as part of proceeding MB Docket No. 16-42?

Answer. Because section 106 of the Copyright Act gives content owners the exclusive right to copy and publicly perform their works, MVPDs must obtain a license from the owners to distribute their works. However, licensing agreements between programmers also commonly contain terms that do not implicate the owners' exclusive section 106 rights. Courts have viewed these terms as simple contractual covenants. In other words, the Copyright Act does not give content owners a "right" to impose terms on licensees that are unrelated to their exclusive section 106 rights.

The FCC's authority to promote the commercial availability of navigation devices under section 629 of the Communications Act is both independent of and complementary to the exclusive rights section 106 of the Copyright Act grants to content owners. As we carry out Congress's command to promote innovation and competition in the navigation device marketplace, we do

not intend to (nor could we) change the rights and remedies available to copyright holders, or the defenses and penalties applicable in cases of copyright infringement.

Question 3. The Copyright Office plainly states that "only Congress, through the exercise of its power under the Copyright Clause, and not the FCC or any other agency, has the Constitutional authority to create exceptions and limitations in copyright law."

Under what authority can the FCC usurp the Constitution as part of proceeding MB Docket No. 16-42?

Answer. As stated above in response to Question 2, the FCC's authority to promote the commercial availability of navigation devices under section 629 of the Communications Act is both independent of and complementary to the exclusive rights section 106 of the Copyright Act grants to content owners. As we carry out Congress's command to promote innovation and competition in the navigation device marketplace, we do not intend to (nor could we) change the rights and remedies available to copyright holders, or the defenses and penalties applicable in cases of copyright infringement.

Response to Written Questions Submitted by Hon. Kelly Ayotte to Hon. Tom Wheeler

Question 1. FairPoint Communications, a New Hampshire constituent company, has a petition before the FCC regarding back payments of high-cost support. Delay in granting the petition may have the effect of delaying further broadband deployment to rural America. Can you commit to me that the FCC will work with FairPoint Communications to resolve this petition before the end of the year?

Answer. Commission staff is evaluating FairPoint's petition and has met with the company several times to discuss the issues raised in the petition. Staff is working to address a number of priorities by the end of the year, including FairPoint's petition.

Question 2. Carriers need to notify the Commission in the next few months if they plan to elect a new cost model for USF support on a voluntary basis, or continue to receive support through a modified version of the system already in place.

a. I understand that depending on how the model election is conducted, it could lead carriers that did not elect the model to be harmed and receive less funding.

i. How is that fair or reasonable? Why would carriers who did nothing and changed nothing in how they conduct business receive less support?

ii. Can we count on the Commission to ensure that this does not happen?

Answer. In 2011, the Commission allocated $2 billion of the total high-cost budget to support for rate-of-return carriers. The *Rate-of-Return Reform Order* did not alter that amount, but did make available to carriers a voluntary path to model-based support as well as certain reforms to the legacy support mechanisms. Given the benefits and certainty of the model, the Commission did allocate an additional $1.5 billion over the10-year term to facilitate the voluntary path to the model. Carriers that choose to continue receiving support from the reformed legacy mechanisms will still receive support based on their own costs, but will be subject to budgetary controls to ensure efficient use of our finite federal universal service resources. How the model election process affects the allocation of the rate-of-return budget amongst carriers will depend on how many and which companies elect the model and how many and which companies choose to remain on the legacy mechanisms.

Question 3. Under the Universal Service Fund, why do the Lifeline and E-rate programs have automatic inflationary adjustments, but the High Cost program lacks this corresponding mechanism? What is the Commission's reasoning for not placing all USF programs on more consistent regulatory footing?

Answer. Of the Universal Service Fund programs, only the E-rate and Lifeline programs have an automatic inflation adjustment. Beginning in 2010, the Commission began adjusting the E-rate cap to account for annual inflation to try to gradually align that program's needs with available funding. With respect to Lifeline programs, beginning in 2016, the funding cap on federal universal service support for Lifeline shall be automatically increased on an annual basis

to take into account increases in the rate of inflation. The High-Cost and Rural Health Care programs do not have such adjustments.

Response to Written Question Submitted by Hon. Dan Sullivan to Hon. Tom Wheeler

Question. The FCC has spent much of its time developing regulations for areas that, to my understanding, do not need more regulation. Yet I have a constituent who has had license renewal applications pending at the FCC for more than 13 years! It seems that the FCC is so busy finding areas to regulate that it has abandoned the duties that they are actually responsible for.

Chairman Wheeler, on June 10, 2016, I, along with members of the Alaska delegation, Senator Murkowski and Congressman Young, sent you a letter requesting that you provide us with a date certain for when the FCC plans to act on pending applications from this company, who has had these applications pending for over 13 years at the Commission. You responded to our letter by saying that you will take action by the fall.

Is it still your intention to make a decision on these pending applications by fall? If so, can you provide me with a date certain?

Answer. On September 30, 2016, the Audio Division of the Media Bureau took action on these applications in a letter decision (DA 16-1117).

Response to Written Questions Submitted by Hon. Ron Johnson to Hon. Tom Wheeler

Question 1. I continue to be concerned that the FCC is layering on reporting and disclosure obligations on wireless providers that will divert resources from broadband deployment in Wisconsin and across the country. One example of this is the FCC's Open Internet Order's Enhanced Transparency Requirements. Apparently, FCC staff has created a safe harbor to these requirements when companies use the FCC-created Measuring Mobile Broadband American Program. However, this program has well-documented flaws and is not even available in large parts of the country. Has the Commission considered creating a safe harbor based on commercially-available sources for mobile performance that would be available to all wireless providers, including small companies in Wisconsin?

Answer. The 2010 Open Internet (OI) Order adopted the Transparency Rule, which requires broadband providers to publicly disclose information regarding the network management practices, performance, and commercial terms of its broadband Internet access services. However, subsequent to adoption of the 2010 Transparency Rule, the Commission continued to receive numerous complaints from consumers suggesting that broadband providers are not providing information that end users and edge providers need to receive. The Enhanced Transparency Rule adopted in the 2015 OI Order, therefore, merely enhanced the Transparency Rule to require specific disclosures beyond the examples provided in the 2010 Order.

The Commission expects that in order to evaluate their own network performance, mobile broadband providers generally already have access to key network performance information representative of the geographic areas in which consumers purchase service. That data—acquired through their own or third party testing—would be the source of a provider's disclosure under the transparency rules. The Commission has provided an optional safe harbor; however, providers remain free to implement alternative approaches for their network performance disclosures.

Response to Written Questions Submitted by Hon. Cory Gardner to Hon. Tom Wheeler

Question 1. Chairman Wheeler, I'd like to commend the Commission on a rare bipartisan win with its recent issuance of the Spectrum Frontiers item. As the world continues to innovate and attempt to overtake the United States in cutting-edge wireless technology, it's more important than ever that we lay the groundwork for continued leadership. Designating spectrum for 5G operations is a major first step in that process.

Recently, Senator Booker and I successfully passed an amendment to the MOBILE NOW Act that demonstrated the importance of both unlicensed and licensed spectrum. Much of the spectrum in the recent Spectrum Frontiers proceeding, however, is already licensed or being made available for unlicensed use. And while it's a positive step that those licensees will be able to deploy mobile services, there is still much work to be done.

Given that the United States is fighting to remain the world's leader in wireless technology, can you commit that the Commission will work to find additional opportunities for licensed spectrum to be made available?

Answer. Yes. As the demand for wireless broadband increases, so does the need for greater coverage and wireless network capacity. To keep up with the growing demand the Commission is pursuing an "all of the above" policy that relies on a balance of licensed, unlicensed, and shared spectrum. Opening up spectrum and offering flexibility to operators and innovators is the most important thing we can do to enable the 5G revolution. The Further Notice of Proposed Rulemaking that was adopted contemporaneously with the Report and Order seeks comment on making an additional 18 gigahertz of licensed spectrum available, on top of the 3.85 gigahertz made available in the Report and Order.

Question 2. Chairman Wheeler, what efforts is the FCC currently undertaking to ensure the expeditious deployment of wireless infrastructure to support 5G service?

Answer. High-speed mobile broadband requires high-speed broadband buildout. However, the regulatory burdens associated with deployments can be expensive and time-consuming. Beginning in 2014, the Commission has taken concrete steps to immediately and substantially ease those burdens. The Commission adopted an Order that recognized a technological revolution with regard to infrastructure deployment had changed the landscape. Distributed Antenna Systems (DAS) networks and other small-cell systems use components that are a fraction of the size of larger, older antennas and towers and can be installed on utility poles, buildings, and other existing structures. The Order excluded certain types of these installations from review, and also directed Commission staff to further streamline review of DAS and small cell deployments within 18-24 months, which was done in late summer of this year. The FCC also substantially reformed tower lighting and marking requirements, which greatly eased compliance burdens for tower owners without any adverse impact on aviation safety.

The success of 5G will hinge upon deploying more densified wireless networks and promoting common-sense siting policies that are essential for these new networks. The Commission is placing particular emphasis on expanding access to spectrum, enabling backhaul connections,

and promoting infrastructure deployment. In August, as noted above, the FCC took a critical step forward on the infrastructure front when our nationwide programmatic agreement was amended, which has streamlined the environmental and historic review process for many small cells. The FCC has also tightened our "shot clock" for siting application reviews. The Commission will continue working to eliminate unnecessary infrastructure siting hurdles for small cells and to ensure that siting review fees and processes at the local level are fair and reasonable.

Advances in technology require that the FCC not only act now to pave the way to the next generation of wireless networks, but we must also update our rules to facilitate the transition away from legacy wired networks. Phone and Internet providers are increasingly replacing their legacy copper networks with next-generation networks that enable greater broadband speeds, efficiency, capacity, and a wealth of innovate features. The Commission acted to ensure that providers can move forward with these transitions efficiently while also ensuring consumers and other customers have the information they need. The Commission also established a streamlined process for reviewing providers' applications to transition to next generation services while ensuring that the enduring values of competition, consumer protection, universal service, and public safety that have long defined our networks remain protected.