Response to Written Questions Submitted by Hon. John Thune to Hon. Michael O'Rielly

*Question 1.* In its further notice of proposed rulemaking in the Spectrum Frontiers proceeding, the Commission talked about following the 4G playbook in making available high band spectrum that we all hope will be a platform for global 5G leadership. At the same time, the FCC sought comment on "use-it-or-share-it" proposals that some argue may devalue high band licenses. Are you at all concerned that these types of sharing proposals could undermine investment in high band frequencies, potentially putting our nation's leadership in 5G at risk?

Answer. Generally, I support efforts to promote sharing of spectrum. However, I raised serious concerns about the sharing proposals in both the order and further notice in my statement on this item. The Commission is considering and seeking comment on "use-it-or-share-it" mechanisms for all millimeter wave bands. And, it already mandated a sharing paradigm between federal and commercial users in the lower 600 megahertz of 37 GHz band (37-37.6 GHz), but exactly how sharing will work is teed up for comment in the further notice. The further notice also seeks comment about whether Federal users should be able to share spectrum with licensees for additional access in the upper 37 GHz band. I am concerned that sharing – whether with commercial or federal users – will reduce investment, decrease certainty, and slow deployment, which could jeopardize the U.S. role as the leader in 5G. It is one thing to allow unlicensed entities to use unoccupied spectrum until the license holder is ready to use it; it is quite another issue – and a problematic one – to undermine commercial licenses obtained at auction.

*Question 2.* 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. I am supportive of unlicensed spectrum and the innovation that it can bring; therefore, I did not object to the designation of the highest bands (64-71 GHz) for unlicensed use. But, I also agree that the proper balance must be struck, which is why I expressed concerns about the sharing proposals raised above. As I stated above, I would have preferred that the lower 600 megahertz of the 37 GHz band was licensed. Also, licensed spectrum should be truly exclusive, but with stringent buildout requirements, so that licensees have the incentive to innovate without the inherent concerns about sharing spectrum. Going forward, more spectrum must be licensed on an exclusive basis.

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

Answer. Yes, additional licensed spectrum must be part of any future spectrum allocations.

*Question 3.* In 2014, Chairman Wheeler 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." He 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, how do you account for this apparent shift from industry-led, public private partnership to prescriptive rulemakings?

Answer. I, too, have observed that, despite assurances by the Commission that it would pursue a voluntary approach to security and risk management, including in a draft Policy Statement still on circulation, the Commission has repeatedly imposed or sought to adopt new requirements. The Chairman's office would be in a better position to account for this shift.

Overall, I find the Commission's efforts to adopt prescriptive rulemakings to be troubling as it does so without sufficient authority provided by Congress. Substantively, the Commission lacks the larger perspective gained from entities outside our purview, potentially creating conflicting requirements and imposing unnecessary burdens.

B. To your knowledge, has the Commission determined that the voluntary, market-based approach has proven to be unsuccessful?

Answer. I am not aware of any such determination.

*Question 4.* 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?

Answer. While I support completely eliminating this particular cross-ownership restriction, to the extent that relief is going to be limited to an exception, I agree that the Commission should

not require a newspaper to be "failing" before a partnership with a local broadcaster can even be considered. It is difficult to see this exception being of any value in today's fast-paced media environment.

Response to Written Questions submitted by Hon. Deb Fischer to Hon. Michael O'Rielly

*Question 1.* Commissioner O'Rielly, I want to thank you for your recent visit to Nebraska, where you got to see first-hand the importance of infrastructure deployment in a rural state like mine. As I'm sure you saw, there are still gaps in coverage that providers are working to close. I am concerned about the impact of the FCC's proposed privacy rules on broadband providers who serve rural areas of the state. Complying with these rules may be very costly and difficult, especially for providers with only a few employees and slim budget margins. I fear that these rules will require more money to be spent on regulatory compliance instead of deploying infrastructure to serve Nebraskans. Commissioner, do you agree?

Answer. Yes, I agree. I have worked hard, along with my colleagues, to reform the high-cost universal service program to promote broadband deployment in rural areas that would not otherwise be served. Imposing new burdens on providers that divert limited resources away from deployment would run counter to this effort. The Commission is currently considering adopting broadband privacy rules and I hope it will carefully consider the costs and benefits of any new requirements, especially for smaller entities.

*Question 2.* I am excited about the opportunities that 5G networks and services may bring for the U.S. and the citizens of Nebraska, and I understand that in addition to making more spectrum available, we will have to build out new wireless infrastructure to make 5G services a reality. I know that 5G networks will rely on equipment that is much smaller than traditional wireless towers, and that these small cells will need to be widely deployed. In August, the FCC's Wireless Bureau took positive steps to help streamline the deployment of small cell antenna systems. However, you have made it clear that the FCC needs to do more. What should the Commission do to address barriers to deploying small cells?

Answer. The Commission's spectrum efforts will only benefit Americans if decision makers, such as private land owners and municipal managers, approve the placement of infrastructure under reasonable terms. Unfortunately, stories of barriers being placed in front of network deployments abound. As I stated in my testimony, some Tribal and local governments are seeking to extract enormous fees from providers and operating siting review processes that are not conducive to a quick and successful deployment schedule. More specifically, I have heard several experiences of localities using the permitting processes to slow or stop facilities siting in their rights of way. At some point, the Commission may need to use the authority provided by Congress to preempt the activities of those delaying 5G deployment without justifiable reasons. This could include proactively trying to help resolve disputes caused by locality inaction or hostility, and designating specific Wireless Bureau staff to travel, testify, and investigate instances of siting problems.

Additionally, we must ensure that providers have the incentive to build backhaul. The Commission should remove barriers to deployment and not add unsubstantiated new burdens.

Response to Written Question Submitted by Hon. Ron Johnson to Hon. Michael O'Rielly

*Question.* The FCC claims it must act on its Privacy Proceeding because Internet Service Providers (ISPs) have a unique insight into a person's viewing habits. However, today, all of the top 10 websites either encrypt by default or upon user log-in, as do 42 of the top 50. An estimated 70 percent of traffic will be encrypted by the end of 2016. So, with the rise of encryption, do ISPs really have this unique information?

Answer. The increasing prevalence of encryption clearly undercuts claims that rules are needed to address ISPs' access to user information. The Commission is currently considering adopting broadband privacy rules, and I hope it will carefully consider such data in determining whether and to what extent new requirements are warranted and justified.

Questions for the Record from Senator Cory Gardner To The Honorable Michael O'Rielly

*Question 1.* Commissioner O'Rielly, you've expressed support for the FCC's efforts to streamline the deployment of small cell antennas, but you've also stated that there remains much work to be done. Particularly given the new buildout required for the oncoming 5G revolution, what more can the FCC be doing to move this effort forward? Do you believe the FCC is capable of single-handedly addressing all remaining impediments to infrastructure buildout? If not, would legislation be helpful in this effort and what role do you believe is proper for Congress to play?

As I stated in my testimony, the biggest impediment to 5G infrastructure that I hear about is that some Tribal and local governments are seeking to extract enormous fees from providers and operating siting review processes that are not conducive to a quick and successful deployment schedule. For instance, I have heard several accounts of localities using permitting processes to slow or stop facilities siting in their rights of way. At some point, the Commission may need to use the authority provided by Congress to preempt the activities of those delaying 5G deployment without justifiable reasons. While the Commission may take this step, legislation is always helpful to obtaining consensus and facilitating Commission action, but I leave the decision as to whether such action is appropriate or warranted to Congress.