Attachment—Additional Questions for the Record

Subcommittee on Communications and Technology Hearing on "Connecting America: Oversight of the FCC" March 31, 2022

The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Cathy McMorris Rodgers (R-WA)

- 1. You were an advocate for the Streamlining Licensing Procedures for Small Satellites Order adopted in August 2019.
 - a. How are the reforms adopted in that Order working?

RESPONSE: Satellite technology—small satellites (or, small sats), in particular—is playing an increasingly important role in the next generation communications landscape. But the FCC's part 25 approach for processing satellite applications was designed for the school bus-sized satellites that first launched decades ago. That approach and its regulatory costs can prevent the business case for small sats from ever getting off the ground. So in 2019, we adopted a Rocket Docket for small sats. Our record showed that a streamlined process for small sats would encourage use cases from predicting crop yields with artificial intelligence to collecting data from sea vessels to aid in fishing operations while continuing to protect against harmful interference. An oversized regulatory burden should never be what stands between entrepreneurs and progress, so I was pleased to support that Order.

Since then, I have heard from many entities in the satellite industry that these reforms have improved the application process, but issues remain. And while the FCC continues to pursue reforms to the rules governing satellite applications and operations—most recently adopting and Order and Notice of Proposed Rulemaking to update rules governing NGSO FSS systems in December 2021—more work needs to be done to support this growing and important sector.

b. As Congress contemplates reform of the rules governing NGSO licensing, are there additional steps that should be taken to streamline the process for small satellites?

RESPONSE: Thanks to your efforts, as well as those of Chairman Pallone, there is bipartisan recognition in Congress of the importance of additional efforts to streamline the process for small sats. Indeed, the final frontier is home to an emerging constellation of satellites that are offering high-speed Internet services. That is great news for American consumers because it provides them with even more choice and competition for their broadband dollars. We need to ensure that America continues to attract the jobs and investments that flow from these innovative operations. And that is why I applaud the bipartisan work of yourself and Chairman Pallone.

Your respective draft bills—the Satellite and Telecommunications (SAT) Streamlining Act and the Secure Space Act—would strengthen America's space-based leadership by further streamlining the licensing process and advancing the security of satellite systems.

- 2. This Committee has a longstanding interest in streamlining the process of deploying broadband infrastructure as a means to increase access to fast and affordable Internet service. For its part, the FCC deserves credit for making progress on this front also over recent years. But more work remains to be done—particularly on Federal lands—to modernize our nation's siting rules. This is particularly important given the recent, massive influx of funding that will spur new builds across the country.
 - a. Do you support further streamlining of our broadband infrastructure rules?

RESPONSE: In 2017, when I joined the Commission, it was clear that our broadband infrastructure rules were overdue for an update. When Chairman Pai tapped me to lead the FCC's infrastructure reforms, we moved quickly to modernize the agency's approach and cut billions of dollars' worth of red tape. We updated the environmental and historic preservation rules that needlessly drove up the cost and slowed down the timeline for adding small cells. We put in place guardrails to address outlier fees and delays imposed at the state and local level. We streamlined the process for swapping out utility poles to add wireless equipment. We created an expedited approval process for tower builds during COVID-19. We accelerated next-gen networks through a 5G Upgrade Order that clarified Section 6409. And we paved the way for more resilient and capable cell sites by streamlining the local approval process for modifying existing sites.

The FCC's infrastructure reforms enabled America's private sector to deliver results. They helped telecom crews bring thousands of families across the digital divide, to keep Americans connected during the pandemic, and to outperform dire predictions from 2016 that the US would cede leadership in 5G to China.

But a lot more work remains, and I support further streamlining broadband infrastructure rules, including when it comes to builds on federal lands. As part of the FCC's continuing effort to close the digital divide, we should look at ways we can continue to streamline the rules of the road for broadband infrastructure across all sectors.

b. What is the FCC doing currently in support of this goal?

RESPONSE: There is a lot more the FCC can do to modernize infrastructure rules and ensure that communities are connected far more quickly. And I have included some of those ideas in the answer below. While I was pleased the Commission sought comment on a pole sharing idea in a March 2022 NPRM, I am ready to work with my FCC colleagues on making progress on additional infrastructure reforms.

c. Are there additional policies that you support that would further modernize/streamline broadband builds across the US?

RESPONSE: Our streamlining efforts must continue, particularly in light of the unique opportunity we have in front of us to end the digital divide. Whether it is the \$65 billion for

broadband in the bipartisan infrastructure bill or the hundreds of billions of dollars that various agencies have allocated for infrastructure projects, we have the chance to ensure that every American has a fair shot at next-gen connectivity. One way that federal and state governments alike could squander that opportunity is by allowing these dollars to get caught up in red tape and by unnecessary fees and charges. After all, if the government is just spending broadband dollars without streamlining infrastructure rules, then it's just stepping on the gas and brakes at the same time.

Specific to pole attachments, there is even more we can do to avoid that outcome. For instance, I continue to hear concerns from broadband builders about unnecessary delays and costs when they seek to attach to poles that are owned by municipal and cooperative utilities. Unlike what the issues raised in the FCC's recent item, there is a strong argument that Section 224 does not give us authority to address issues specific to those types of poles. Therefore, I encourage states and Congress to take a closer look at these issues—and revisit the exemption that exists in Section 224—so that we can ensure deployment is streamlined, regardless of the type of pole you are attaching to.

As part of the FCC's continuing effort to close the digital divide, we should also look at ways we can continue to streamline the rules of the road for fiber and other high-speed wired deployments. During the prior Administration, the FCC took steps to ensure that the fees charged for placing small wireless facilities in rights of way do not violate Section 253. We should begin to explore similar action for the deployment of other, wired infrastructure to ensure that the funding being made available by Congress and the FCC goes into the ground and towards connecting families.

We should also make sure that all of our policies are going to encourage private sector investment in infrastructure. We must reject calls for government-subsidized overbuilding, which jeopardizes the operations of businesses that risked their own capital to serve local communities. Instead, we need to direct funding to communities that have been left behind, rather than those that already benefit from high-speed Internet services today.

Finally, members of this Committee have also put forward a series of smart steps that can be taken to streamline and accelerate infrastructure builds. Indeed, I applaud the package of 28 bills in the Boosting Broadband Connectivity Agenda, as well as the recently unveiled bipartisan efforts to modernize the FCC rules governing the processing of applications for low-earth orbit satellites—a set of rules that have not kept up with the pace of change. As you know from spending time nearly 200 feet in the air with a tower crew in Spokane, infrastructure work is already hard enough and we don't need outdated regulations making it even more difficult.

The Honorable Steve Scalise (R-LA)

1. As you may know, since coming to Congress, I have led efforts to modernize our nation's outdated video laws. My goal has been to ensure that everyone in the marketplace gets paid for their products and consumers have more freedom to choose what programming they want to pay for.

a. Can you describe the extent to which streaming services that wish to offer local stations have been able to do so without retransmission consent?

RESPONSE: The video marketplace has changed dramatically in the 30 years since the 1992 Cable Act was enacted. And in recent years, streaming services and other new entrants have brought much needed competition to the market. We have heard, however, that a number of new services have had difficulty reaching carriage agreements with certain content providers, including local stations.

b. Has the lack of retransmission consent agreements between broadcasters and streaming services created distortions in the marketplace?

RESPONSE: The current regulatory landscape is skewed by outdated and asymmetric regulations that to do not reflect the modern video marketplace. These outdated laws and regulations often create distortions and artificial bargaining leverage that can result in reduced competition and consumer choice.

2. In your view, does the lack of regulation for streaming services correlate with the innovation and popularity of these services? If so, please explain why?

RESPONSE: The complete absence of regulation is not a necessary condition for innovate new services to grow and thrive. Instead, such services should be subject to appropriate regulation that is tailored to the service and consistent with the overall video marketplace. But too often, and for too long, new services are simply wedged into an existing regulatory framework that fails to promote competition and consumer choice.

3. In light of your consideration of question 2, what steps can and should the Commission take to reform the video marketplace in a manner that allows all services (including streaming, cable, and satellite) to compete on a level playing field?

RESPONSE: Under then Chairman Pai's leadership, the FCC launched a "Media Modernization" initiative, which was designed to eliminate outdated regulations and promote competition in the media marketplace. I supported that initiative and would welcome additional steps to rationalize the media regulations at the FCC. However, many regulations are rooted in statutory requirements, and the FCC's ability to revise or remove these regulations may be limited.

4. In light of your consideration of question 2, what steps can Congress take to reform the video marketplace to better reflect the competition in the marketplace today?

RESPONSE: Congress has an important—if not central—role in reforming the regulations governing the video marketplace to help promote competition and consumer choice. You, along with Congresswoman Eshoo, have long advocated for the need to update our outdated video laws, including most recently with the introduction of the Modern Television Act of 2021. I would welcome the opportunity to discuss these issues with your office.

The Honorable Gus M. Bilirakis (R-FL)

1. Commissioner Carr, I want to thank you for your continued efforts to add Chinese government involved companies to the FCC's covered list. I share our concerns about the national security issues with companies connected to the Chinese Communist Party and believe that they are putting American security at risk. In recent weeks, I have been troubled by reports of China based company, Da Jiang Innovations (DJI) providing location information of DJI drones in use by the Ukrainians to the invading Russian forces. Is there any reason to suspect that DJI could be doing the same thing with drones in use by the US government?

RESPONSE: DJI drones and the surveillance technology on board are collecting large amounts of sensitive data that could be exploited by Beijing. This could include everything from high-resolution images of critical infrastructure to personal data from the operator's smartphone. DJI's collection of vast troves of sensitive data is especially troubling given that China's National Intelligence Law grants the Chinese government the power to compel DJI to assist in espionage activities. Although various components of the U.S. government have taken a range of independent actions—including grounding fleets of DJI drones based on security concerns—a consistent and comprehensive approach to addressing DJI's potential threats is not in place. Reports about DJI drones being used by the Russian military in Ukraine only underscore the need for the U.S. to adopt such an approach.

2. What are the repercussions if the Secure and Trusted Communications Networks Reimbursement program is not fully funded? Do we have estimates on how many companies may refuse to participate? Will China continue to have a stronghold on our communications networks?

RESPONSE: The FCC is currently reviewing applications submitted through the Secure and Trusted Communications Networks Reimbursement program. Of the total 181 applications that were filed, 162 were initially found eligible and acceptable for filing. Of those applications filed and initially found eligible and acceptable for filing, the gross cost estimate demand for support for the removal, replacement, and disposal of Huawei and ZTE equipment is approximately \$5.6 billion. As you know, Congress appropriated \$1.9 billion to the Commission to carry out the Reimbursement program.

A funding shortfall would significantly hamper the FCC's ability to ensure the program's success. Without additional funding from Congress, carriers would be required to come up with additional funding on their own to carry out the removal and replacement of insecure gear. For small carriers in particular, the financial burden could lead to reduced service or shuttering their business entirely. Alternatively, other carriers may simply opt out of the program all together, placing their USF support at risk so long as the covered equipment remains in their networks.

Given the national security implications, I believe that once we determine the final budget shortfall, the funding gap should be closed. Since Congress has already appropriated billions of dollars towards closing the digital divide in recent COVID-19 related spending packages, I would encourage a review of those programs—as well as any others that may be appropriate—to

determine whether funding can be re-programmed towards the Reimbursement program in order to close the shortfall.

I stand ready to work with you and your colleagues in Congress to ensure the Reimbursement program has the resources necessary to be successful. However, at the same time, the FCC should continue to use every tool at our disposal to protect America's communications networks. To that end, I have urged four lines of action. First, the FCC must keep our Covered List up to date. Second, the FCC should act quickly to bring our proceeding required by the Secure Equipment Act to a vote. Third, the FCC should build on our actions in the Section 214 context by opening a new proceeding to examine whether we should prohibit regulated carriers from directly interconnecting with entities that have been deemed a national security risk, even if those entities are operating in a manner that does not require a Section 214 authorization. And four, the FCC should publish a list of every entity with an FCC license or authorization that is owned or controlled by Communist China.

The Honorable Bill Johnson (R-OH)

1. Do you believe Congress must fully fund the Secure and Trusted Communications Network Reimbursement Program in order for it to be successful in securing our nation's communications networks?

RESPONSE: Given the national security implications, I believe the budget shortfall—once the FCC reaches a final determination on that amount—should be closed. Since Congress has already appropriated billions of dollars towards closing the digital divide in recent COVID-19 related spending packages, I would encourage a review of those programs—as well as any others that may be appropriate—to determine whether funding can be re-programmed towards the Reimbursement program in order to close the shortfall.

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The Honorable Earl L. "Buddy" Carter (R-GA)

1. The IIJA requires the NTIA to utilize the FCC's new maps when deciding how much of the \$42.5B each State should receive.

a. Upon the release of the first version of the FCC's broadband DATA Maps, to what extent do you expect the first version to be challenged – both because of the accuracy of the Broadband Fabric and the providers' filings?

RESPONSE: I defer to Chairwoman Rosenworcel and her team, as they are the ones with a direct, day-to-day insight into the agency's work on mapping, but my own expectation is that there should be minimal need for a significant challenge process. After all, Congress provided \$98 million in the Broadband Data Act to ensure the FCC compiles accurate broadband maps. Doing so is key to the ongoing efforts to end the digital divide.

b. In addition, how long do you believe it will take to process any challenges that are received and how much more accurate will the map be as a result of the challenge?

RESPONSE: With the caveat that Chairwoman Rosenworcel and her team control the day-to-day work on the agency's mapping efforts, my expectation is that the final maps the FCC produces are accurate and do not require significant work or a lengthy challenge process.

2. Commissioner Carr, the United States has an opportunity to unlock 500 megahertz of mid-band spectrum in the 12 GHz band for new terrestrial 5G uses. Through the Commission's ongoing 12 GHz NPRM, some stakeholders have suggested that coexistence is possible between existing satellite services and higher power, two-way terrestrial operations that would pave the way for new 5G services. However, other stakeholders have countered these claims, and the expert engineers are currently reviewing both technical arguments. How do you view the status of this issue, and what more can be done to make more spectrum available for 5G?

RESPONSE: A range of different providers offer services in the 12 GHz band today. As part of the ongoing 12 GHz proceeding, the FCC is assessing whether adding additional authorizations would promote or hinder the delivery of next-generation services. As we do so, I believe it is imperative that we approach the policy and technical issues associated with this band in a balanced manner to ensure that we reach a result that will promote the public interest. I hope that the engineering demonstrates that we can get to a win-win in this proceeding.

But in order to maintain US leadership in 5G, we must also look outside the 12 GHz band. Going forward, we can make more spectrum available for 5G through additional spectrum auctions and reassigning spectrum for consumer use. For one, we could authorize very low power devices to operate in the 6 GHz band and also allow client-to-client device communications in that band. For another, we could seek comment on increasing the power levels for CBRS operations in the 3.5 GHz band. For still another, we could start a proceeding to look at updating the rules that apply to unlicensed operations in the mid-band swath of spectrum known as U-NII-2C—perhaps even permitting very low power operations there. And in 2022 and beyond, we could then shift our focus to the Lower 3 GHz band and several additional spectrum bands.

The Honorable John R. Curtis (R-UT)

1. I am excited about the promise of low earth orbit (LEO) satellite systems and their ability to deliver high speed connectivity to remote communities in Utah. LEO satellite providers have announced plans to launch thousands and even tens of thousands of satellites, which drastically increases the need for safety rules and coordination among competing systems. How do you intend to address these space safety concerns and ensure these new technologies are deployed responsibly?

RESPONSE: I share your excitement about the future of the satellite industry to provide much needed Internet service to remote communities in Utah and beyond. And I also share your concerns regarding space safety as more and ever-larger constellations take to the sky.

Over the years, I have expressed concerns about the FCC's jurisdiction and expertise when it comes to orbital debris. After all, analyzing collision risk, spacecraft maneuverability, ionic sodium-potassium droplets, tubular cylinder deployers and separation rings—which represent just some of the considerations that go into orbital debris rules—are not areas within the Commission's core competencies. This is not a slight against the FCC's talented engineering staff, but this stuff is literally rocket science.

So while I believe that the FCC must have a seat at the table to ensure safety concerns are addressed and new technologies are responsibly deployed, I don't think it should be our table. Instead, expert agencies with experience in aerospace engineering, like NASA, NOAA, and the FAA, should be leading these efforts. And it is imperative that any FCC rules in this area consider the standards and guidance of our sister agencies involved in this space (pun intended).