

Attachment—Additional Questions for the Record
Subcommittee on Communications and Technology
Hearing on
“Accountability and Oversight of the Federal Communications Commission”
May 15, 2019

The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Anna G. Eshoo (D-CA)

- 1. During the worst fire in California’s history, Verizon throttled the data speeds of Santa Clara County firefighters, hindering their ability to communicate.**
 - a. If the 2015 Open Internet Order wasn’t repealed, could this practice have been considered a violation of the ban on “unjust and unreasonable” business practices?**

Response: The FCC majority stated in the *2015 Open Internet Order* that “a broadband provider may offer a data plan in which a subscriber receives a set amount of data at one speed tier and any remaining data at a lower tier.” *2015 Open Internet Order* at para. 122. The majority thus made clear that, under the *2015 Open Internet Order*, a broadband provider would not run afoul of the “no throttling” rule by engaging in that type of conduct.

- b. Has the FCC taken any actions to avoid a repeat of this issue in California and other parts of the country by Verizon or other ISPs?**

Response: As noted above, the *2015 Open Internet Order* did not expressly prohibit the type of conduct at issue here. Because of the FCC’s *2017 Restoring Internet Freedom Order*, ISPs are now required to provide clear public disclosures about the services they provide to consumers, which are subject to potential enforcement by the FTC.

- 2. Under the 2015 Open Internet Order, the FCC could investigate possible violations of bright-line prohibitions of net neutrality and other “unjust and unreasonable practices.”**
 - a. Since the 2017 Restoring Internet Freedom Order, has the FCC been investigating whether ISPs are engaging in blocking, throttling, or paid prioritization practices, both as disclosed by ISPs and undisclosed practices?**

Response: The *2017 Restoring Internet Freedom Order* adopted a transparency rule that requires ISPs to publicly disclose information about their network management practices,

performance characteristics, and commercial terms of its broadband Internet access services. The *Order* also requires ISPs to either make such disclosures on a publicly available, easily accessible website or provide the disclosure directly to the FCC. *2017 Restoring Internet Freedom Order* at para. 215.

Pursuant to a December 2017 Memorandum of Understanding between the FCC and the Federal Trade Commission, the FCC reviews informal complaints concerning ISPs' compliance with the disclosure obligations set forth in the transparency rule. Because of the FCC's *2017 Restoring Internet Freedom* decision, the FTC is now empowered to investigate and take enforcement action against ISPs for violations of their disclosures, including any violations that involve blocking, throttling, or paid prioritization.

b. If not, would the FCC even know if “Over the past year, the Internet has remained free and open,” as Chairman Pai stated on January 2, 2019?

Response: Prior to the FCC's *2015 Open Internet Order*, consumers and innovators alike benefited from a free and open Internet. After a two-year experiment with heavy-handed regulation—one that saw investment decline, broadband deployments put on hold, and innovative new offerings shelved—the FCC returned to this proven regulatory approach. And Americans across the country are now seeing the results. Internet speeds are up nearly 40%. Americans saw more fiber broadband built to their homes and businesses last year than ever before. The number of small cells put up in this country increased from around 13,000 in 2017 to more than 60,000 in 2018. The digital divide—the percentage of Americans lacking access to high-speed Internet—narrowed by almost 20 percent last year alone. While there is much more work to do to secure U.S. leadership and ensure every American has a fair shot at next-generation connectivity, we are now heading in the right direction. The FCC's new policies are working.

3. The National Verifier has launched in 16 states where it lacks access to any databases for state-administered programs, such as the Supplemental Nutrition Assistance Program and Medicaid. Should an individual be informed that the National Verifier was not able to confirm their eligibility, they could reasonably consider this a denial from Lifeline, even though they may be eligible.

a. Given these issues, what specifically is the FCC or USAC doing to ensure the National Verifier connects with state databases in the states where it has launched or where it is planning to launch, and what is the timeline to do so?

Response: As of March 2019, the Lifeline National Verifier had been launched in 27 states and territories, with plans to add more states underway. Also as of March 2019, the National Verifier was able to check an automated connection to a state eligibility database for 93% of subscribers in states where the National Verifier has launched. Where the National Verifier cannot connect automatically to a state eligibility database, then the consumer's eligibility is determined through a manual review process. I understand that the FCC and USAC are also working to stand up

additional, automated connections for the purposes of checking eligibility that could be up and running later this year.

- b. Given the above issues regarding the rollout of National Verifier, why is the FCC pushing forward to launch in more states rather than focusing on improving connections to federal and state databases in states where National Verifier is currently deployed?**

Response: The National Verifier is important in helping to mitigate the burdens on eligible consumers seeking to sign up for Lifeline service. Additionally, it is key to helping prevent waste, fraud, and abuse in the Lifeline program by ensuring that carriers are not enrolling ineligible individuals. I believe we should encourage an expeditious rollout of the National Verifier across the country.

- 4. As the FCC considers USTelecom's petition for forbearance from key provisions of the Telecommunications Act of 1996, what has the FCC done to consider the impact of granting this petition on (i) small and medium-sized ISP's building out the fiber networks needed for upgrading our country's wireless infrastructure to 5G and for closing the digital divide; and (ii) federal, state, local, and tribal government agencies, particularly those that will continue to rely on TDM-based telephone services through the continued availability of resale requirements?**

Response: I have not made a final decision on the USTelecom petition at this time. My review of relevant issues and considerations is still ongoing. However, I will look at all information filed in the record through the lens of the statutory factors set forth in Section 10 of the Communications Act.

- 5. Should the FCC further eliminate media ownership rules as it is considering, Americans may experience a sharp reduction in the breadth and diversity of voices available in any local media market. One entity could control all broadcast TV stations, local newspapers, and radio stations. This is a direct rebuke to a fundamental value that underpins our democracy. Please share whether you are considering such outcomes and to what degree you have concerns about the consolidation of media ownership.**

- a. Has the FCC's newly created Office of Economic Analysis provided input on the impact of eliminating media ownership rules on consumer prices in the video marketplace?**

Response: In December of 2018, the FCC voted to seek comment on its broadcast ownership rules, as the Commission is required by statute to review the rules every four years. I am still reviewing the record in this proceeding, and I have not made any final decisions. The Office of Economic Analysis is required to review and provide input on all Commission rulemakings, and

I will consider their input, as well as all other relevant information, as I continue my review of the record in this proceeding.

- 6. The FCC is considering a proposal to alter what may be considered toward the statutory maximum of five percent franchise fees (MB Docket No. 05-311). This would negatively impact the access of communities to public, educational, and governmental (PEG) programming. As I stated in my February 22, 2019 letter to the FCC, Congress clearly intended for communities to have access to PEG. The legislative history of the 1984 Cable Act explicitly states that franchise fees are only made up of monetary payments and do not include PEG contributions (H.R. Rep. No. 98-934 (1984)). Congress made its intent on this matter explicit and clear.**

- a. Under what statutory authority is the FCC considering this proposal which would have the effect of including PEG contributions in franchise fees?**

Response: In September of 2018, the FCC voted unanimously to seek comment on a proposal to ensure that cable franchise fees do not exceed the statutory maximum of five percent. My staff and I have met with a variety of stakeholders on this proceeding. I have not made a final decision in the PEG proceeding. My review of the relevant legal, policy, and other issues is ongoing.

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The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Yvette D. Clarke (D-NY)

- 1. It is wonderful to see how technology has broken down barriers for people with disabilities, but I am concerned this same technology can introduce new challenges for consumers. As the FCC considers moving to fully Automated Speech Recognition or ASR, I am concerned that fully automated ASR might not work as well for certain types of accents or voices. This could become a serious problem as we move towards widespread adoption of such services. Certain consumers might be left behind.**

- a. What has the FCC done to investigate whether fully automated ASR for IP CTS does not feature implicit or inadvertent bias?**

Response: The FCC has an obligation to ensure that telecommunications services are available to Americans with hearing loss. As such, the Telecommunications Relay Service Fund, which subsidizes the cost of IP CTS, serves vitally important purposes. This is an issue that has been raised in the record in a pending rulemaking. I have not made a final decision in this proceeding and my review of the record is ongoing.

- b. Will you commit to undertake such studies before certifying an ASR only provider?**

Response: Before certifying an ASR-only provider, we must ensure that doing so is in the public interest, which includes the provider's ability to comply with our TRS service standards.

- 2. In considering the UST petition, does the Commission have the flexibility to take into account disparate market conditions or is it required to simply approve the petition as filed? Does the Commission have the flexibility to consider the impact of a natural disaster in a local market, such as Hurricane Maria in Puerto Rico, and how the local market conditions were and still are being impacted post-hurricane?**

Response: The FCC does not have to approve forbearance petitions as filed. In addition, the D.C. Circuit has determined that Section 10 of the Communications Act "imposes no particular mode of market analysis or level of geographic rigor."

- 3. Will the Commission take into account the special circumstances of how Hurricane Maria devastated the local telecom infrastructure, as well as the local economy, into its consideration of the UST petition and whether such deregulation should occur at this time in Puerto Rico?**

Response: I have not made a final decision on the USTelecom petition at this time. My review of relevant issues and considerations is still ongoing.

4. The Telecommunications Act of 1996 did not preempt local regulatory bodies from the Commission's evaluation of whether a market was competitive or not and thus warranted certain regulatory relief.

- a. Will you give deference to the input from the local jurisdictions as to whether the local market conditions warrant deregulation at this time, particularly in the case Puerto Rico where the recovery efforts are still ongoing?**

Response: I believe the FCC should always give due consideration to the views expressed by local jurisdictions in FCC proceedings.

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The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Darren Soto (D-FL)

- 1. Late last year, the FCC initiated a proceeding looking at how to mitigate space debris. While I think it is a positive step to consider how to address this problem, the Commission may not have the technical expertise or the resources necessary to develop or enforce the complicated regulations it is considering proposing. Further, I understand the FCC has requested a reduced budget for these activities in FY20.**
 - a. Do you agree that it is important to ensure that any orbital debris mitigation regime be straightforward and enforceable?**

Response: Six years ago, NASA estimated that there were half a million debris objects in orbit around Earth. These objects can cause catastrophic collisions with spacecraft—and their number is growing as interest in space has increased for commercial and defense purposes. The next generation of satellites will fly at a lower altitude and be much more numerous than previous generations. The FCC approved requests for nearly 8,000 such low-earth orbit satellites in our November meeting alone.

There is no question that the possibility of thousands of new satellites, passing each other in low-earth orbit at hypervelocity, presents complex questions and will likely require a new set of rules that address collision risks. The safety and economic interests at stake require the federal government to get orbital debris issues right. But as I have stated on a number of occasions, it is far from clear that the FCC is the right federal agency to make these assessments. I thus share some of the concerns indicated in your question above. In my view, the FCC should look to other agencies and bodies with deep background and expertise on orbital debris issues for their leadership on appropriate mitigation measures.

- b. Please provide me with the number of employees supporting this project in total and the number of employees on this project with undergraduate or graduate degrees in relevant technical fields, specifically: aerospace, aeronautical, and/or astronautical engineering. Given the reduced budget you are requesting for FY20, is the FCC able to hire additional technical experts with degrees in these fields?**

Response: I refer you to the Chairman of the FCC for any questions on the status of FCC employees working on this effort.

- 2. What is the FCC currently doing to ensure that minority programmers are being included by providers; especially in Metropolitan Statistical Areas (MSA) with large minority communities that are currently being underserved?**

Response: Diversity is one of the touchstones of the FCC's media policy. At the Commission, we've been working on policies that reduce barriers to entry into the media marketplace, including through the FCC's radio incubator program, which aims to encourage new entrants into the media industry by providing access to capital, training, and expertise for new entrants. I was glad to cast my vote in favor of establishing that program, and the Media Bureau began accepting applications this month. Since being reestablished in September of 2017, the FCC's Advisory Committee on Diversity and Digital Empowerment has been advising the Commission on ways to increase diversity in the technology and telecom industries, and I welcome their continued input on ways the FCC can further encourage diversity in media.

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The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Robert E. Latta (R-OH)

- 1. When Congress passed the Americans with Disabilities Act in 1990, it directed the Commission to ensure that hearing and speech-impaired individuals be able to place and receive assisted telephone calls. Congress also directed that these telecommunications relay services be paid for equitably - with intrastate assessments used to fund intrastate services and interstate assessments used to fund interstate relay services.**

The Commission chose to “temporarily” fund the entire telecommunications relay service program through only interstate (and international) assessments and then repeated that “temporary” funding approach in 2007 when internet protocol service calls (IP CTS) were added to the program.

As I understand it, last year the Commission proposed in its Further Notice of Proposed Rulemaking (FNPRM) on IP CTS to revise the funding mechanism so that all IP CTS calls would be recovered from all providers of, intrastate, interstate and international telecommunications, interconnected VOIP and non-interconnected VOIP providers.

Commissioner Carr, would you support moving the provisions of the 2018 FNPRM related to correcting the “temporary cost recovery method” expeditiously to create a permanent method in advance of the 2020-2021 TRS Fund year?

Response: As you note, in June 2018, the FCC adopted an item that proposed to expand the IP CTS contribution base to include a percentage of annual intrastate revenues from telecommunications carriers and VoIP providers. The item proposed to expand the IP CTS contributions base because the service is available nationwide and it is therefore no longer necessary to continue an interim mechanism originally intended to spur nationwide deployment. Additionally, the Commission noted that, because most IP CTS end-user revenues and minutes of use are intrastate, it is inequitable to continue leaning on carriers whose traffic is primarily interstate. I am still reviewing the record we received in this particular proceeding. That said, as we move forward with reforming IP CTS, I am focused on ensuring stability for the TRS Fund and low prices for IP CTS consumers.

- 2. My concern is about how we deliver broadband to all Americans, especially unserved and underserved Rural America. One technology will not be the panacea for this challenge, but we will need a combination of solutions. Can you**

comment on what role you see spectrum playing in rural America and discuss if you think spectrum sharing is a feasible part of that solution?

Response: Bringing more broadband to more Americans has been my top priority at the FCC. And nowhere is the challenge of providing fast Internet access greater than in rural America. As you point out, no single technology will meet that challenge, and so the Commission has a number of programs that encourage fiber construction, fixed wireless builds, and mobile service, among others.

Spectrum is a critical input in our efforts to bridge the digital divide. We saw this first-hand from the top of a grain elevator in Sugar Ridge, Ohio, where a WISP beamed 25 Mbps broadband to more than 8,000 customers, including the local Sheriff's Department. The WISP provided broadband across farms and dirt roads using 900 MHz and 3.65 GHz spectrum. As you know, the 3.5 GHz band—which includes some of the spectrum the Sugar Ridge WISP uses—is shared with the Navy.

The Commission concluded a proceeding in October to put the 3.5 GHz band to more robust use. We worked with our federal partners to share the band with private sector users. And by creating an innovative dynamic-sharing arrangement between users, we were able to protect incumbents, provide more robust licensed use, and offer at least half the band for General Authorized Access. We hope to see the band be put to further commercial use later this year, which may be a model for spectrum-sharing when a band cannot otherwise be cleared.

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The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Greg Walden (R-OR)

- 1. Would you support the Chairman's effort to move forward in evaluating appropriate allocation of the 5.9 GHz band at this time? Why or why not?**

Response: Yes, I would. The 5.9 GHz band is a valuable swath of spectrum. It sits adjacent to the 5.8 GHz unlicensed band, which, in combination with the 2.4 GHz band, carries the lion's share of Internet traffic, including a majority of smartphone traffic in the U.S. The adjacent 6 GHz band also is being considered for additional commercial use. The 5.9 GHz band has been allocated for automotive uses but has not been robustly deployed. It is important that we consider a full range of options so that we can make an informed decision about the future use of the band.

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The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable John Shimkus (R-IL)

- 1. Under the FCC’s oversight, the Universal Service Administrative Company (USA) has worked to establish a “National Verifier” system to combat fraud in the Lifeline program by ensuring all applicants are eligible for Lifeline benefits. It is my understanding USAC is actively transitioning many states from “soft-launch” status, in which participation in the National Verifier system is voluntary, to a mandatory verification system. I want to ensure that we expeditiously continue this transition to a more secure and accurate verification system. Please describe how the FCC, working with USAC, will continue the push for implementation of a robust mandatory National Verifier system.**

Response: The National Verifier is key to helping prevent waste, fraud, and abuse in the Lifeline program by ensuring that carriers are not enrolling ineligible individuals. I believe we should take all steps needed to continue to encourage an expeditious rollout of the National Verifier.

As of March 2019, the Lifeline National Verifier had been launched in 27 states and territories, with plans to add more states underway. Also as of March 2019, the National Verifier was able to check an automated connection to a state eligibility database for 93% of subscribers in states where the National Verifier has launched. Where the National Verifier cannot connect automatically to a state eligibility database, then the consumer’s eligibility is determined through a manual review process. I understand that the FCC and USAC are also working to stand up additional, automated connections for the purposes of checking eligibility that could be up and running later this year.

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The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Susan W. Brooks (R-IN)

- 1. I have heard much about how the Commission's order to speed approval for 5G technology deployment has been helpful, but can you elaborate on how else Congress or the Commission can support timely build out of 5G infrastructure?**

Response: The FCC's efforts to accelerate 5G deployment are working. Internet speeds are up nearly 40 percent. More fiber was built last year than ever before. The number of small cells deployed increased from 13,000 in 2017 to 86,000 in 2018. And the U.S. now has the world's largest 5G build. Many of the reforms the FCC put in place advanced ideas championed by you in Congress and by state and local leaders in their own legislatures.

Going forward, one of the challenges to building next-gen wireless infrastructure in our country is a shortage of qualified tower techs. Industry estimates that it could hire another 20,000 workers to build, scale, and upgrade infrastructure so that we can win the global race to 5G. A few months ago, I announced an initiative to address workforce training at Aiken Technical College in South Carolina. Aiken has developed a tower training program that, at a relatively low cost and in just 12 weeks, can give a student with no prior tower experience the training she needs to gain certification and land a job as a tower tech. At the time I visited Aiken, every student who had completed the course had been offered a job. Aiken provides a model that should be replicated across the country. I am working with other federal agencies on a plan to provide more opportunities like Aiken's, and I am grateful for Congressional leadership on this issue, including most recently Rep. Walberg and Rep. Clarke's TOWER Infrastructure Deployment Act.

Another major obstacle to building 5G infrastructure is the federal government's own siting processes. You have been a leader on this issue, including streamlining broadband infrastructure permissions on federal buildings and property as part of the appropriations bill that was enacted last spring. Too many rural communities lack broadband because they happen to be next to federal land that is impeding connectivity. The federal agencies that have jurisdiction over these siting issues should continue to clear regulatory roadblocks to infrastructure buildout.

- 2. I firmly believe that letting the private sector compete is the best way to ensure the U.S. will be the world leader in 5G technology. Can you address criticisms of that idea and the notion that the U.S. should nationalize a wholesale 5G network to somehow ensure its leadership in this space?**

Response: You are correct: America will win the race to 5G through the power of free markets, not government control. When an ill-conceived plan to have the federal government nationalize a 5G network was first floated this spring, I wrote an op-ed detailing its flaws. The op-ed is

available here: <https://www.nationalreview.com/2019/03/nationalizing-5g-is-not-the-way-to-beat-china/>

Time and again, history teaches us that fighting China with China-like policies will fail. The 4G networks in the U.S. are the envy of the world. What's not? Our government-run infrastructure projects, such as our crumbling roads and bridges and failed high-speed-rail projects. We cannot expect anything better from a government-run 5G network. In fact, many European countries have taken a government-directed approach to broadband, and the result has been network investment at half the level we see in the U.S.

If there is a threat to our pole position in the race to 5G, it's too much government interference, not a lack of government control. We need to stay focused on unleashing private sector investment in infrastructure by cutting red tape and unnecessary government impediments to buildout. That is how the U.S. won the race to 4G, and that's the winning playbook for 5G.

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The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Tim Walberg (R-MI)

1. **During the hearing, I briefly asked about the need for a more robust, capable workforce for the communications industry. As you know, even with unlimited spectrum, siting reforms, or Federal dollars, none of these will get 5G, next generation fiber networks, or broadcasting infrastructure into the market without a skilled, professional workforce capable of deploying it in a timely manner.**

How is the Commission approaching this workforce issue, and what steps can the Commission take to get all stakeholders to the table and create good, high-paying jobs that maintain technological leadership here in the United States?

Response: Having a skilled workforce in place is essential to winning the race to 5G and deploying next-gen networks in communities across the country. Right now, industry estimates that it could add an additional 20,000 tower techs to meet current and future demand for infrastructure buildout. That's why, in April, I announced a 5G jobs initiative that looks to community colleges as a pipeline for 5G jobs. It builds on a program at Aiken Technical College in South Carolina, which can take someone with no skills and, through a seven or 12-week program, provide them the skills necessary to land a good-paying job as a tower tech. I am working with Aiken Tech, the National Wireless Safety Alliance, and other stakeholders to stand up more of these programs at community colleges and technical schools across the country.

- a. **Would the Commission benefit from a longer-term viewpoint and approach to this issue if it were elevated and authorized in statute to a full advisory committee as opposed to a working group under an existing advisory council?**

Response: I welcomed the introduction of the TOWER Infrastructure Deployment Act and am grateful for the leadership that you and others in Congress have shown on workforce development. These efforts are vital to bringing attention to the shortage of tower techs needed to deploy 5G and coordinating the stakeholders necessary to create more community college tower training programs and apprenticeship opportunities.