NATIONAL TAXPAYERS UNION

October 20, 2020

The Honorable Ajit Pai
Chairman
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Re: Petition for Rulemaking to Permit MVDDS Use of the 12.2-12.7 GHz Band for Two-Way Mobile Broadband Service, RM-11768

Dear Chairman Pai:

On behalf of the National Taxpayers Union (NTU), the nation's oldest taxpayer advocacy organization, I write to you concerning the MVDDS 5G Coalition's ("Coalition") April 2016 Petition for Rulemaking to Permit MVDDS Use of the 12.2-12.7 GHz Band for Two-Way Mobile Broadband Service. American taxpayers and consumers have a significant stake in the future of both 5G and broadband deployment across the nation, and for that reason NTU is compelled to weigh in on this proposed utilization of the 12.2-12.7 GHz band. A variety of industry stakeholders have recently offered their own comments on the matter, and their proposals may represent difficult tradeoffs for the Commission.

NTU has largely supported the Commission's recent efforts to unleash private-sector 5G and broadband deployment,[1] and we continue to believe that light government involvement is the best path forward for America's long-term global economic competitiveness.[2] Unfortunately, the Coalition's Petition for Rulemaking would have the Commission significantly interfere with ongoing broadband deployment efforts from non-geostationary satellite orbit (NGSO) operators. We recently joined a coalition letter organized by Americans for Tax Reform (ATR) that made a similar point:

[1] See: Glass, Kevin. "FCC's 5G Rollout Proposal Will Help U.S. Lead the Technology Race." National Taxpayers Union, September 10, 2018. Retrieved from: https://www.ntu.org/publications/detail/fccs-5g-rollout-proposal-will-help-us-lead-the-technology-race; Aiello, Thomas. "FCC Proposed Rulemaking Will Boost Development of Broadband Internet Services." National Taxpayers Union, September 18, 2018. Retrieved from: https://www.ntu.org/publications/detail/fcc-proposed-rulemaking-will-boost-development-of-broadband-internet-services; "Adoption of 5G Rules Will Keep U.S. On Technological Cutting-Edge." National Taxpayers Union, September 26, 2018. Retrieved from: https://www.ntu.org/publications/detail/adoption-of-5g-rules-will-keep-us-on-technological-cutting-edge

[2] For example, see: Lautz, Andrew. "What's at Stake for Taxpayers With DoD's Government 5G Proposal." National Taxpayers Union, October 13, 2020. Retrieved from: https://www.ntu.org/publications/detail/whats-at-stake-for-taxpayers-with-dods-government-5g-proposal

> While the petitioners' goal is providing more options and new entrants for 5G, that goal comes at a cost of severe interference to the latest generation of satellite broadband networks that are a year out or less from providing full service.[3]

The Commission also recognizes the importance of these ongoing efforts by NGSO operators. In March 2018, upon the approval of SpaceX's proposal to deploy thousands of satellites for broadband using frequencies in the Ku (11/14 GHz) band, the Commission wrote:

> With this action, the Commission takes another step to increase high-speed broadband availability and competition in the United States. This is the first approval of a U.S.-licensed satellite constellation to provide broadband services using a new generation of low-Earth orbit satellite technologies.[4]

Given the vast potential of this technology to close the digital divide, it would be unwise to take actions that threaten the widespread deployment of broadband via low-Earth orbit (LEO) satellites, especially when NGSO operators are mere months away from deploying even more satellites under this system.[5] Indeed, SpaceX has confirmed that "any proposal that would undermine current and future satellite use of the 12 GHz Band would place at risk the achievements in this band and impede the deployment of critical broadband services for consumers, including in the most rural and remote areas of the country."[6]

While NTU recognizes the tremendous benefits that may flow from robust private-sector 5G deployment around the nation, the 12.2-12.7 GHz band has not even been a major part of the conversation on 5G. As the nonpartisan Congressional Research Service (CRS) noted in a recently updated background paper on 5G:

> 5G technologies plan to use three segments of the electromagnetic spectrum ("the spectrum"): high band (also called millimeter wave, or MMW), which operates between around 24 and 300 GHz; mid band, which operates between 1 GHz and 6 GHz; and low band, which operates below 1 GHz.[7]

And as the nonpartisan think tank TechFreedom noted in its October 2020 filing with the Commission:

> When FCC Chairman Pai talks about closing the Digital Divide, he often references his travels into rural America...

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[3] Americans for Tax Reform. (October 16, 2020). "ATR Leads Coalition Protecting Satellite Broadband Deployment." Retrieved from: https://www.atr.org/atr-leads-coalition-protecting-satellite-broadband-deployment?amp (Accessed October 19, 2020.)
[4] Federal Communications Commission. (March 29, 2018). "FCC Authorizes SpaceX to Provide Broadband Services Via Satellite Constellation." Retrieved from: https://www.fcc.gov/document/fcc-authorizes-spacex-provide-broadband-satellite-services (Accessed October 19, 2020.)
[5] Americans for Tax Reform. (October 16, 2020). "ATR Leads Coalition Protecting Satellite Broadband Deployment." Retrieved from: https://www.atr.org/atr-leads-coalition-protecting-satellite-broadband-deployment?amp (Accessed October 19, 2020.)
[6] SpaceX. (June 4, 2020). "Re: Notice of Ex Parte Communication, RM-11768." Retrieved from: https://ecfsapi.fcc.gov/file/1060479869727/SpaceX%20MVDDS%20Ex%20Parte%206.4.2020%20(FINAL).pdf (Accessed October 19, 2020.)
[7] Hoehn, John R., and Sayler, Kelley M. "National Security Implications of Fifth Generation (5G) Mobile Technologies." Congressional Research Service, October 8, 2020. Retrieved from: https://crsreports.congress.gov/product/pdf/IF/IF11251 (Accessed October 19, 2020.)

> Get further into rural America, however, and 5G only works well when combined with mid-band and low-band frequencies, capable of transmitting out many miles. It is a pipe dream to hypothesize that high-band 5G, such as proposed in the Petition, is going to make it out to all those dirt roads and paths.[8]

Finally, Direct Broadcast Satellite (DBS) providers that currently have access to the 12.2-12.7 GHz band have argued that an NPRM could threaten access to video programming for "tens of millions of households and businesses." According to AT&T's August 2020 filing with the Commission:

> ... the Coalition, its individual members, and the Eleven Organizations ignore and/or attempt to minimize the fact that such services are fundamentally incompatible with the Direct Broadcast Satellite ("DBS") services upon which tens of millions of households and businesses rely to receive video programming.
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> ...As AT&T has previously noted, the operation of terrestrial, twoway mobile service (or otherwise permitting higher-power terrestrial operations) in this satellite band would create an untenable interference environment for DBS subscribers.

Stakeholders, then, have presented at least three compelling arguments for why the Commission should *not* move forward with a Notice of Proposed Rulemaking (NPRM) allowing for two-way mobile broadband service: 1) an NPRM would create significant uncertainty for NGSO broadband deployment, potentially impacting service for the very Americans the Commission is hoping most to reach; 2) the 12.2-12.7 GHz band is not well situated for 5G development and deployment; and 3) an NPRM could interfere with service for millions of Americans who currently receive DBS services from operators using the 12.2-12.7 GHz band.

While the Commission should continue to explore how it can best enhance the private sector's ability to harness, develop, and deliver faster and more reliable internet to the tens of millions of Americans that depend on these services - especially those in hard-to-reach areas of the country - it is clear than the NPRM requested by the Coalition is the wrong approach. We believe NGSO-deployed broadband offers an innovative approach to closing the digital divide and therefore respectfully ask the Commission to reject the Coalition's request.

Thank you for your consideration, and should you have any questions I am at your service.

Sincerely,

Andrew Lautz
Policy and Government Affairs Manager

CC: Ms. Marlene H. Dortch, Secretary, Federal Communications Commission

[8] TechFreedom. (October 8, 2020). "Ex Parte Comments of TechFreedom." Retrieved from: https://ecfsapi.fcc.gov/file/1008910715630/TF%20Comments%2012%20GHz%20MVDDS.pdf (Accessed October 19, 2020.)