January 12, 2018

VIA ELECTRONIC FILING
Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Ex Parte* Presentation of Hughes Network Systems, LLC
Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, GN Docket 17-199

Dear Ms. Dortch:

Hughes Network Systems, LLC ("Hughes") submits this filing to address misinformation about the capabilities of satellite broadband technology that have been disseminated through a handful of submissions made in several on-going proceedings before the Federal Communications Commission ("Commission"), including, most recently, the Institute for Local Self-Reliance ("ILSR") and Next Century Cities' ("NCC") reply comments in the Section 706 Notice of Inquiry ("Section 706 NOI") proceeding.[1] Hughes seeks to ensure that in these proceedings the Commission has before it all of the necessary information to correctly to evaluate and understand the technical capabilities of the competitive broadband platforms available to U.S. consumers.

The facilities through which satellite-based broadband networks deliver high-quality, high-speed, affordable broadband services to anywhere in the United States, including unserved and remote regions, substantially increased in 2017 with the deployment of new, advanced high-throughput satellite systems. Hughes' EchoStar XIX high-throughput satellite entered into commercial service in March 2017 and currently delivers broadband services that meet or exceed Commission-defined speeds of 25/3 in the continental United States, Southeastern Alaska, Puerto Rico, and the U.S. Virgin Islands.[2] Moreover, Hughes began construction of its next generation satellite, EchoStar XXIV/Jupiter 3, which, when launched, will deliver even higher speeds of around 100 Mbps down and 10 Mbps up, and expanded services throughout the United States.[3] Additionally, ViaSat, Inc., another U.S.-based satellite broadband provider, is also in the process of significantly increasing its available capacity

[1] Reply Comments of ILSR and NCC in GN Dkt. No. 17-199 filed October 6, 2017 ("ILSR Filing").
[2] *See* Hughes, *Press Release: Hughes Announces HughesNet Gen5 High-Speed Satellite Internet Service*, https://www.hughes.com/who-we-are/resources/press-releases/hughes-announces-hughesnet-gen5-high-speed-satellite-internet (Mar. 07, 2017).
[3] Hughes expects to launch Jupiter 3 in 2021. S*ee* Hughes Application for HNS 95W space station, IBFS File No. SAT-LOA-20170621-00092 (filed June 21, 2017); *See also* Hughes, *Press Release: Hughes Selects Space Systems Loral to Build Next-Generation Ultra High Density Satellite*, https://www.echostar.com/en/Press/Newsandmedia/Hughes%20Selects%20Space%20Systems%20Loral%20To%20Build%20Next-Generation%20Ultra%20High%20Density%20Satellite.aspx (August 9, 2017).

and satellite broadband offerings with the recent launch of ViaSat-2, and the construction of the ViaSat-3 satellites.[4]

Hughes has also partnered with WorldVu Satellites Limited, d/b/a OneWeb ("OneWeb"), to produce the ground network system that will support OneWeb's nongeostationary orbit ("NGSO") satellite constellation.[5] In June 2017, the Commission granted United States market access to OneWeb to provide low-latency, high-capacity broadband services throughout the United States via a low earth orbit NGSO satellite network.[6] OneWeb, with the assistance of Hughes', plans to begin deploying its network by 2019.[7]

Hughes currently provides satellite broadband services, at Commission-defined broadband speeds, to consumers, including government, residential, and enterprise customers, across the United States. Many customers who rely on Hughes for the provision of broadband services are situated in rural, remote, and tribal areas where terrestrial broadband infrastructure can be prohibitively expensive to deploy or install. Increasingly, Hughes has found that there is a growing demand for satellite broadband services in more urban areas as well; especially as the speeds and capacity of the networks continue to grow.

In this ex parte, Hughes responds to commenters, particularly ILSR and NCC, who claim to advocate for the needs of small and mid-sized communities in rural and remote portions of the country, but instead advance policies that would effectively eliminate a technology that enhances broadband competition, and thereby deny a broadband service option for many Americans.

ILSR is mistaken in its assertion that satellite-based services should not be considered a "broadband" service because of limited satellite capacity.[8] ILSR relies extensively on the Measuring Broadband America Report 2016 (the "Report") as the basis for its argument.[9] However, the extrapolations made by ILSR do not align with the conclusions drawn by the Report, nor with the current broadband deployment environment. The statement in the Report, as cited in the ILSR Filing, states that "capacity limits [were] being approached for [the current] satellite constellation[s]," thus impairing the ability of satellite providers to offer comparable to services to other ISPs. These concerns highlighted by the Report have been addressed, by the launch of new satellite networks by Hughes and other satellite broadband providers. Hughes and the other satellite broadband providers are also ensuring the continued availability additional satellite capacity to meet the ever-growing U.S.

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[4] ViaSat launched its ViaSat-2 high capacity satellite in June 2017 and anticipated the satellite will start delivering Internet service in early 2018, *see* ViaSat, *Blog Post: Status Update For ViaSat-2, Our Newest Satellite*, https://www.exede.com/blog/status-update-viasat-2-newest-satellite/ (August 23, 2017); ViaSat expects to launch the first ViaSat-3 satellite by 2019, see ViaSat, *Going Global*, https://www.viasat.com/news/going-global.

[5] *See* Hughes, *Press Release: Hughes Signs $190M Contract with OneWeb for Production of Ground Network System for Global Internet Services*, November 7, 2017. Available at: https://www.echostar.com/en/Press/Newsandmedia/Hughes%20Signs%20190M%20Contract%20with%20OneWeb.aspx.

[6] *WorldVu Satellites Limited, Petition for a Declaratory Ruling Granting Access to the U.S. Market for the OneWeb System*, IBFS File No. SAT-LOI-20160428-00041 (adopted June 22, 2017).

[7] Statement of Greg Wyler: "Hughes has been an outstanding technology partner and we are excited to deploy this essential part of our network as we ramp up to launch the first of our fleet early next year and provide service to every rural home in Alaska starting in 2019." *Id.*

[8] ILSR Filing at pg. 3.

[9] Id.

consumer demand for broadband capacity, through the development and construction additional state-of-the-art networks, including EchoStar XIV/Jupiter 3 and planned NGSO constellations, such as OneWeb.

ILSR and NCC are so determined in their narrative to portray satellite-based broadband services as "particularly poor" compared with other broadband offerings, they misconstrue the true meaning of the performance ratios referenced in the Report.[10] While Hughes' performance ratio may have declined, the Report still lauded Hughes for continuously delivering services to consumers at speeds 1.5 times higher than promised. [11] Moreover, in the same paragraph where ILSR and NCC alleged evidence of an irremediable flaw in the technology, the Report goes on to note that this decrease in performance ratio is likely the result of increased subscribership and usage, and is expected to be reversed by the launch of additional satellite capacity, such as EchoStar XIX. Since the Report was released, EchoStar XIX has been successfully launched and entered into commercial service, adding more than 200 Gbps of capacity to the Hughes network and providing speeds of at least 25/3 to consumers throughout the United States.[12]

Furthermore, ILSR incorrectly asserts, without any substantiation, that satellite broadband services are unable to support new interactive, cloud-based, smart technologies, such as the Amazon Echo, Google Home, and other Wi-Fi devices.[13] Hughes has tested such devices on the Hughes satellite network in accordance with their standard characteristics, and these devices are widely enjoyed by HughesNet customers today.[14]

For the Commission to ensure that broadband services can reach every home in the United States, the Commission must develop regulatory frameworks that are founded on the principle of technology neutrality therebyensuring competition among platforms. In order for the Commission to fulfill this objective, the Commission should dismiss comments that encourage the adoption of anti-competitive and technologically-biased standards. Consumers should be permitted to choose the services that meet their needs, and competition will continue to foster greater broadband innovation.

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[10] ILSR Filing at pg. 3.
[11] FCC, Measuring Broadband America Report 2016, at Section A. Available at: https://www.fcc.gov/reports-research/reports/measuring-broadband-america/measuring-fixed-broadband-report-2016.
[12] About EchoStar XIX. Available at: https://www.hughes.com/technologies/hughes-high-throughput-satellite-constellation/echostar-xix.
[13] ILSR Filing at pg. 2.
[14] *See attached* Hughes Declaration of Patrick Fisher, January 10, 2018.

Please contact the undersigned if you have any questions or require any additional information.

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