

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, DC 20554

In the Matter of	)	
	)	
Update to Parts 2 and 25 Concerning	)	IB Docket No. 16-408
Non-Geostationary, Fixed-Satellite	)	
Service Systems and Related Matters	)	

**COMMENTS OF WORLDVU SATELLITES LIMITED, HUGHES NETWORK  
SYSTEMS, LLC, AND INTELSAT CORPORATION**

WorldVu Satellites Limited, d/b/a OneWeb, Intelsat Corporation, and Hughes Network Systems, LLC (the “Satellite Operators”) submit these Comments in response to the Further Notice of Proposed Rulemaking adopted by the Federal Communications Commission (the “Commission”) in the above-captioned proceeding.<sup>1</sup>

The Satellite Operators oppose the Commission’s proposal to eliminate the domestic coverage requirement for non-geostationary (“NGSO”), fixed-satellite service (“FSS”) systems.<sup>2</sup> The FNPRM represents a significant departure from the Commission’s current policy objectives, statutory purpose, and rationale for adopting the domestic coverage requirement for NGSO systems more than twenty years ago.<sup>3</sup> As demonstrated below, elimination of the domestic coverage requirement is not in the public interest. Operators with currently pending U.S. license

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<sup>1</sup> *In re Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, Report & Order and Further Notice of Proposed Rulemaking, IB Docket No. 16-408, FCC 17-122 (rel. Sept. 27, 2017) (“FNPRM”).

<sup>2</sup> FNPRM at ¶ 76.

<sup>3</sup> *See* 47 U.S.C. § 151 (the Commission was established “to make available, so far as possible, to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service”).

or market access applications were aware of this requirement when they designed their systems and filed their applications, and they should be held to the current six-year domestic coverage requirement.

## **I. REMOVING THE DOMESTIC COVERAGE REQUIREMENT WILL UNDERMINE THE COMMISSION’S LONGSTANDING BUT UNREALIZED GOALS FOR NGSO FSS SYSTEMS**

Under Chairman Pai’s outstanding leadership, the Commission has forcefully articulated the urgency of closing the digital divide and focused considerable agency resources on facilitating connectivity.<sup>4</sup> The Commission maintained this same vision when it first adopted the domestic coverage requirement for NGSO FSS systems, as they have the potential to “provide universal access.”<sup>5</sup> Specifically, the geographic coverage requirements created for low-earth orbit (“LEO”) satellite systems, like NGSO FSS systems, were designed to “allow coverage to

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<sup>4</sup> See, e.g., *Remarks of FCC Chairman Ajit Pai at the Ronald Reagan Presidential Library, “Morning in Digital America,”* Simi Valley, CA (Oct. 10, 2017), available at [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-347182A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-347182A1.pdf) (“My top priority is pretty simple, too. Going back to my first full day as Chairman in January, I’ve said again . . . and again . . . and again that the FCC will focus foremost on bridging the digital divide.”).

<sup>5</sup> The Commission rightly determined that “it serves the public interest to adopt a coverage area requirement” for NGSO FSS systems because they “are capable of fostering a seamless global communications network.” *In re Rulemaking to Amend Parts 1, 2, 21, & 25 of the Commission’s Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules & Policies for Local Multipoint Distribution Serv. & for Fixed Satellite Servs.*, Third Report & Order, 12 FCC Rcd 22310, 22323 ¶ 34 (1997) (“Third Report & Order”).

populated areas that cannot be reached by GSO [geostationary-orbit] systems”<sup>6</sup> and that have remained underserved by terrestrial networks.<sup>7</sup>

Given the Commission’s overwhelming commitment to expand U.S. broadband access, “particularly [to] rural Americans,”<sup>8</sup> it is especially puzzling for two reasons that the Commission would propose to roll back an already-existing requirement that can operate as a powerful mechanism to close the digital divide.

*First*, the Commission has never been closer to seeing the emergence of at least one NGSO FSS constellation utilizing state-of-the-art satellite technology to facilitate universal access and deliver high-speed broadband connectivity to previously unserved or underserved areas.<sup>9</sup> Within the last two years, many operators—following OneWeb—have proposed the type of “seamless global communications network[s]”<sup>10</sup> the Commission originally envisioned for

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<sup>6</sup> *In re Amendment of the Commission’s Rules to Establish Rules & Policies Pertaining to A Mobile Satellite Serv. in the 1610-1626.5/2483.5-2500 MHz Frequency Bands*, 9 FCC Rcd 5936, \*6 ¶ 23 (1994) (adopting the international and domestic coverage requirements for “Big LEO” MSS satellite systems, which were later applied to NGSO FSS systems as well).

<sup>7</sup> It is often prohibitively expensive for terrestrial providers to access and deploy service to these rural and remote areas. *See, e.g., In re Connect America Fund, Universal Service Reform – Mobility Fund, Connect America Fund – Alaska Plan*, Report & Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 10139, 10162 ¶ 72 (2016).

<sup>8</sup> *Remarks of FCC Chairman Ajit Pai at “Broadband for All” Seminar, Stockholm, Sweden*, 2017 WL 2773761, at \*4 (June 26, 2017).

<sup>9</sup> A working group of the ITU’s Broadband Commission for Sustainable Development recently recognized the “extraordinary transformation” of NGSO capabilities. Broadband Commission for Sustainable Development, *Working Group on Technologies in Space and the Upper-Atmosphere: Identifying the Potential of New Communications Technologies for Sustainable Development*, <http://broadbandcommission.org/Documents/publications/WG-Technologies-in-Space-Report2017.pdf>, at 24 (Sept. 2017).

<sup>10</sup> Third Report & Order at ¶ 34.

NGSO FSS spectrum.<sup>11</sup> Although the Commission has recently relaxed its milestone requirement for NGSO FSS systems, operators with currently pending applications were well aware of the six-year domestic coverage requirement at the time they filed their applications and should be held to that requirement.

*Second*, the four-paragraph FNPRM articulates no rationale for removing the domestic coverage requirement, outside of a reference to “afford[ing] operators greater flexibility in their system designs.”<sup>12</sup> Nor does it explain the potentially significant impact that removing the requirement would have on broadband availability in rural areas, especially for the far northern and southern parts of the United States. The Commission has repeatedly emphasized its expectation that NGSO FSS systems will be instrumental in ensuring broadband access for unserved and underserved areas.<sup>13</sup>

If the Commission eliminates the domestic coverage requirement, the incentive to serve these rural and underserved areas will be lost, and NGSO FSS operators could simply bypass

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<sup>11</sup> A majority of the recent applicants proposing to deploy NGSO FSS networks demonstrated compliance with the domestic coverage requirement currently in effect, which requires such coverage within six years of receiving approval from the Commission.

<sup>12</sup> FNPRM at ¶ 76.

<sup>13</sup> See *In the Matter of WorldVu Satellites Limited Petition for a Declaratory Ruling Granting Access to the U.S. Market for the OneWeb NGSO FSS System*, Order and Declaratory Ruling, 32 FCC Rcd 5366, 5366 ¶ 1 (2017) (stating that the Commission granted OneWeb market access in order to advance its mandate “to make available, so far as possible, to all the people of the United States . . . rapid, efficient, Nation-wide, and world-wide” service); *In re Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, 2016 Broadband Progress Report, 31 FCC Rcd 699, 719-20 ¶¶ 45-47 & n.155 (2016) (highlighting NGSO FSS applicants’ “substantial investments . . . to improve service and extend broadband access to new markets”).

these areas in favor of high-density population bases. Therefore, removing the domestic coverage requirement at this time would not only undermine the Commission’s longtime deployment goals for NGSO FSS satellite operators, but it would also impede its ongoing efforts to close the digital divide.

## **II. RETAINING THE DOMESTIC COVERAGE REQUIREMENT DOES NOT PRECLUDE THE COMMISSION FROM GRANTING RULE WAIVERS THAT ARE IN THE PUBLIC INTEREST**

It is in the public interest for the Commission to retain the domestic coverage requirement for NGSO FSS systems, and its removal would serve no valid policy goal. Instead, the Commission can and should retain the rule and grant case-by-case waivers for systems focused on reaching underserved areas first.

The FNPRM observed that removal of the domestic coverage requirement would permit certain specialized operators to serve niche markets.<sup>14</sup> However, the Commission has long granted waivers to applicants proposing specialized or niche services (including NGSO FSS systems) that depart from the Commission’s existing licensing frameworks but are nonetheless in the public interest.<sup>15</sup> Waivers may be granted for good cause when they serve the public interest.<sup>16</sup>

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<sup>14</sup> FNPRM at ¶ 75.

<sup>15</sup> See, e.g., *Space Norway AS, Petition for a Declaratory Ruling Granting Access to the U.S. Market for the Arctic Satellite Broadband Mission*, Order and Declaratory Ruling, FCC 17-146 (rel. Nov. 3, 2017) and *O3b Limited, Stamp Grant*, IBFS File Nos. SAT-LOI-20141029-00118 and SAT-AMD-20150115-00004 (granted Jan. 22, 2015).

<sup>16</sup> See *In re Applications of Intelsat LLC*, 15 FCC Rcd 15460, 15486 ¶ 59 (2000) (the Commission has an “obligation to seek out the ‘public interest’ in particular, individualized cases” where a waiver may be appropriate).

The Satellite Operators do not oppose the case-by-case licensing of such specialized satellite networks (despite their inability to comply with the domestic coverage requirement) where appropriate.<sup>17</sup> However, NGSO FSS operators seeking licensing or U.S. market access for constellations composed of thousands of satellites represent precisely the kind of satellite networks for which a waiver of the domestic coverage requirement would *not* be in the public interest. Releasing such NGSO FSS applicants from the domestic coverage requirement would undermine the Commission's commitment to facilitating broadband access to remote and underserved areas and would ignore the unique ability of NGSO FSS systems to meet that goal.

Accordingly, NGSO operators proposing to serve the United States (with thousands of satellites, for example) should not be allowed to pick where to provide service when deploying the orbital and spectrum resources capable of serving the entirety of the United States.<sup>18</sup> Thus, rather than abandoning the domestic coverage requirement, the Commission should (i) carefully consider case-by-case requests to waive it where appropriate and (ii) be highly skeptical of waiver requests made by NGSO FSS operators who propose large constellations, but, for financial reasons, have designed their systems in the hopes of a waiver that allows them to provide service only to urban populations rather than *all* of the United States in the six year time frame.

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<sup>17</sup> The types of specialized satellite networks contemplated in the FNPRM – those designed to serve niche markets with distinct interests – likely constitute the kinds of unique satellite architectures for which a waiver of the domestic coverage requirement are in the public interest.

<sup>18</sup> See, e.g., *Application of Space Exploration Holdings, LLC for Approval for Orbital Deployment and Operating Authority for the SpaceX NGSO Satellite System*, IBFS Docket No. SAT-LOA-20170301-00027, Call Sign S2992, Legal Narrative at 2 and Waiver Requests at 9-10 (March 1, 2017) (proposing a LEO and very low earth orbit system with nearly 12,000 total satellites, but requesting a partial waiver of the domestic coverage requirement).

### III. CONCLUSION

The Commission proposes to remove the domestic coverage requirement at precisely the moment unserved and underserved consumers need it most. The domestic coverage requirement is essential to bridging the digital divide and should be retained. OneWeb and others designed their NGSO FSS constellations in compliance with the domestic coverage requirement and the Satellite Operators see no valid policy reason why other large global NGSO constellations should not be required to do the same.

Respectfully submitted,

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