

EXHIBIT 1
DESCRIPTION OF PROPOSED MODIFICATION
(Response to Questions 43)

Pursuant to 47 C.F.R. § 25.117, Hughes Network Systems, LLC (with its affiliates, “Hughes”) submits this modification application seeking a one-year extension—until March 20, 2024—of the milestone date required under its license to launch and operate the EchoStar XXIV satellite (“EchoStar XXIV” or “Jupiter 3”) (Call Sign S3017) at 95.2° W.L.¹ As demonstrated herein and consistent with Section 25.117(e), the requested milestone extension is warranted due to: (i) unforeseeable circumstances beyond Hughes’ control, including disruptions caused by the ongoing Covid-19 pandemic, the war in Ukraine, and production-related delays with the satellite manufacturer of EchoStar XXIV; and (ii) unique and overriding public interest considerations.² Notably, construction of EchoStar XXIV, a next-generation, high-throughput Ka- and Q/V-band geostationary orbit (“GSO”) broadband satellite, requires custom components and facilities that have been severely impacted by supply chain disruptions and other restrictions caused by the global Covid-19 pandemic, war in Ukraine, and production-related delays associated with the development, production, and testing of the components of the satellite.

¹ See Hughes, Stamp Grant, IBFS File No. SAT-MOD-20200612-00072 (Sept. 3, 2020).

² Alternatively, Hughes requests a waiver of the milestone requirement for good cause, which may be found when: (i) particular facts would make strict compliance inconsistent with the public interest; and (ii) grant of a waiver will not undermine the policy objectives of the rule. See 47 C.F.R. § 1.3; *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969), *cert. denied*, 409 U.S. 1027 (1972); *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164 (D.C. Cir. 1990). Here, strict rule compliance would be contrary to the public interest by undercutting substantial consumer benefits, as further discussed herein, resulting from successful launch of the EchoStar XXIV satellite network. Additionally, grant of the requested waiver for a limited time would be fully consistent with the rule’s policy objectives of ensuring prompt service deployment and preventing spectrum warehousing. As evidenced herein, Hughes has made substantial progress toward construction of the satellite and expects to complete construction and launch as soon as possible.

I. Satellite Construction Delays Due to Unforeseeable Circumstances Beyond Hughes' Control Warrant Grant of the Requested Milestone Extension

The Commission may grant an extension of a satellite milestone date when additional time is required due to unforeseeable circumstances beyond the applicant's control.³ The Commission established milestone requirements to deter warehousing by satellite operators before a proposed space station has been launched and begun operations.⁴ The underlying policy objective of these requirements is to ensure that licensees proceed with construction and launch their satellites in a timely manner so that valuable spectrum will not be held to the exclusion of others by operators who do not intend to bear the cost and risk of constructing, launching, and operating the space station, are not fully committed to doing so, or find out after accepting the license that they are unable to fulfill the associated obligations.⁵

A. Covid-19 Delays

Grant of the requested extension would be consistent with similar relief granted by the Commission, recognizing the Covid-19 pandemic as an unforeseeable circumstance warranting relief.⁶ Indeed, the Commission has affirmed that the Covid-19 pandemic "is a unique and unusual circumstance that has resulted in widespread delays in the receipt of communications

³ 47 C.F.R. § 25.117(e)(1).

⁴ *Comprehensive Review of Licensing and Operating Rules for Satellite Services*, Second Report and Order, 30 FCC Rcd 14713, ¶ 53 (2015) ("Comprehensive Satellite Services Rules"); see also *TerreStar Networks, Inc. Request for Milestone Extension*, Memorandum Opinion and Order, 22 FCC Rcd 17698, ¶ 6 (IB 2007).

⁵ See *Comprehensive Satellite Services Rules*, ¶ 53.

⁶ See, e.g., *Satellite Communications Services Information re: Actions Taken*, Public Notice, Rep. No. SES-02492, at 8-9 (Aug. 17, 2022) ("HNS Earth Station Milestone Extension") (referencing grant of HNS License Sub, LLC's application for extension of construction milestone); *Viasat, Inc., Application for Extension or Waiver of Milestone*, Order, DA 21-1638, ¶ 6 (IB 2021) ("Viasat-3 Milestone Extension"); *Waiver of FCC Rule Sections 1.946 (c) and (d) for Wireless Site-Based and Mobile-Only System*, Order, 35 FCC Rcd 3536, ¶ 2 (WTB/PSHSB 2020) (extending wireless construction deadlines based on disruptions caused by Covid-19).

equipment and has caused delays in network construction.”⁷ In particular, the Commission found that delays caused by Covid-19 are ubiquitous, and regulatory restrictions and other public health and safety measures have created “gaps in all phases of the supply and deployment chain.”⁸ Accordingly, the Commission has granted construction extensions for the EchoStar XXIV ground network in recognition of disruptions caused by the Covid-19 pandemic.⁹

Construction of the EchoStar XXIV satellite has also been impacted by this unprecedented disruption. Notably, the satellite manufacturer experienced significant disruption, leading to months of accumulated delays as a result of restrictions imposed to combat the global pandemic. At the manufacturing site, critical components from a key sub-contractor were significantly delayed as a result of stay-at-home orders. In addition, U.S.-Canada border restrictions limited the availability of key personnel to work on the satellite. Further, workplace restrictions to ensure the safety of staff resulted in a reduction of efficiency in manufacturing such components. These factors and others delayed construction and testing of EchoStar XXIV.

B. War in Ukraine

Beyond the pandemic-related delays, the satellite manufacturer also reported delays as a result of the war in Ukraine as well as required compliance with the Defense Production Act of 1950. The outbreak of war in Ukraine and subsequent U.S.-imposed sanctions on Russia preclude the use of a Russian-based cargo plane to deliver the satellite from the manufacturing facility to the launch facility, thus extending the time required for transportation. Moreover, the satellite manufacturer’s obligation to prioritize fulfillment of certain U.S. government contracts

⁷ Viasat-3 Milestone Extension, ¶ 6 (quotations omitted).

⁸ *Id.* (citing *Waiver of FCC Rule Sections 1.946 (c) and (d) for Wireless Site-Based and Mobile-Only System*, 35 FCC Rcd 3536, ¶¶ 4-5 (WTB/PSHSB 2020)).

⁹ See HNS Earth Station Milestone Extension.

resulted in the unavailability of a key testing facility for a period of time. These delays, like those caused by the pandemic, are and were entirely outside the control of Hughes.

C. Production-Related Delays

EchoStar XXIV is a complex, next-generation satellite that incorporates a number of new designs and technologies. During production and in addition to the delays detailed above, the satellite manufacturer experienced delays in the production of certain components built by subcontractors. Such delays were primarily due to the fact that it has taken longer than planned to ensure consistent and high-quality unit production of novel components. These delays have manifested primarily in the testing phase, requiring significantly more cycles than planned. The ability to resolve these issues were further compounded by the COVID-related delays discussed above. Due to the novelty and complexity of the satellite design, much of the construction work is performed sequentially, making it difficult to progress the construction of the satellite without delivery of the components needed in each earlier step. Like the delays caused by the pandemic and the war in Ukraine, these production-related delays were entirely beyond the control of Hughes.

Despite these challenges, Hughes and the satellite manufacturer have continued construction of EchoStar XXIV and have sought to mitigate delay. For example, the satellite manufacturer hired consultants to address personnel shortages and moved certain tasks into the satellite manufacturer's production facility rather than using subcontractors.¹⁰ Hughes has sought to reduce delay by procuring a launch vehicle that removes the need for electrical orbit raising, thus eliminating months of further delay.

¹⁰ The satellite manufacturer also sought to set up new factories to emulate subcontractor processes that were delayed and shift personnel to address more urgent projects.

II. Unique and Overriding Public Interest Concerns Further Justify Grant of the Requested Milestone Extension

The Commission may also extend a satellite milestone based on unique and overriding public interest concerns that justify an extension.¹¹ Grant of such an extension here would be consistent with Commission precedent and strongly serves the public interest.

Hughes has paid over 93% of the price of constructing the satellite – a significantly greater percentage than was the case with other successful applicants at the time of their requests for milestone extensions.¹² Additionally, Hughes continues to develop the associated ground network and expects to complete deployment and expend 90% of the construction costs by the end of 2022.¹³ These significant expenditures strongly incentivize Hughes to complete construction and commence operations of EchoStar XXIV as soon as possible. Importantly, Hughes continues to invest in completing the EchoStar XXIV network and has more than sufficient financial resources to construct, launch, and operate the satellite. Indeed, Hughes has a long track record of successful launch and operation of satellites, including from the August 2007 launch of Spaceway 3 to the December 2016 launch of EchoStar XIX, and has every confidence in the successful launch of its next-generation EchoStar XXIV satellite.

EchoStar XXIV will provide substantial additional capacity for new broadband service to government, small business, and residential consumers throughout the continental United States and the Americas. The pandemic and global conflicts have highlighted the importance of deploying robust networks delivering high-speed broadband connectivity for remote work, education, and health care to unserved and underserved communities both in the United States

¹¹ 47 C.F.R. § 25.117(e)(2).

¹² See *Viasat-3 Milestone Extension*, ¶¶ 3, 5.

¹³ See, e.g., IBFS File Nos. SES-LIC-20210304-00433 (grant June 1, 2021); SES-LIC-20210304-00434 (grant Nov. 4, 2021); SES-MOD-20220520-00586 (grant Aug. 15, 2022).

and around the world. Ensuring that Hughes can launch EchoStar XXIV will enable it to provide significant broadband speed improvements over existing services, and support increased efficiencies in providing cost-effective, resilient broadband service.

Additionally, ensuring successful launch and operations of EchoStar XXIV will bolster Hughes' disaster relief efforts and capabilities. In many cases, satellite is the only reliable communications system following a natural disaster.¹⁴ Indeed, Hughes has provided crucial broadband services in the wake of numerous disasters, including Hurricane Michael in 2018 and Hurricane Dorian in 2019.¹⁵

III. Conclusion

Based upon the foregoing, Hughes respectfully requests Commission grant of a one-year milestone extension, until March 20, 2024, to launch and operate EchoStar XXIV, thus allowing prompt deployment of new and additional services to U.S. consumers and abroad.

¹⁴ See Comments of Liga de Cooperativas de Puerto Rico, WC Dkt. No. 18-143, et al. at 1-2 (Jul. 2, 2018); see also *The Uniendo a Puerto Rico Fund and the Connect USVI Fund*, Report and Order and Order on Reconsideration, 34 FCC Rcd 9109, ¶ 46 (2019) (“We agree with numerous commenters that allowing inclusion of satellite providers is particularly valuable in the context of Puerto Rico and the U.S. Virgin Islands due to satellite’s resilience and availability post-hurricanes.”).

¹⁵ See, e.g., EchoStar Satellite Services, LLC, Special Temporary Authorizations to Extend Service to the Bahamas for Emergency Operations, IBFS File Nos. SAT-STA-20190906-00088 & SAT-STA-20190925-00101 (granted Sept. 6 & Nov. 14, 2019).

DECLARATION

On behalf of Hughes Network Systems, LLC (“Hughes”), I declare under penalty of perjury that the following is true and correct to the best of my current knowledge, information, and belief:

1) the requested extension of time is warranted due to unforeseeable circumstances beyond Hughes’ control, including disruptions caused by the Covid-19 pandemic, war in Ukraine, and other manufacturing delays, as detailed in the foregoing Exhibit 1; and

2) the requested extension of time is further warranted due to unique and overriding public interest considerations, as detailed in the foregoing Exhibit 1.

/s/ Jennifer A. Manner

Jennifer A. Manner

Senior Vice President, Regulatory Affairs

Date: October 17, 2022