# Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)
Space Norway AS	) ICFS File No.: SAT-MPL-20230308-0004
Petition for Modification of Grant of U.S. Market Access for the Arctic Satellite Broadband Mission to Extend or Waive Milestone Date	) Call Sign: S2978

#### ORDER AND DECLARATORY RULING

Adopted: October 3, 2023 Released: October 3, 2023

By the Chief, Space Bureau:

#### I. INTRODUCTION

1. By this Order, we grant Space Norway AS (Space Norway) a one-year extension of the deadline for launch and commencement of operation of the first satellite in its two-satellite, non-geostationary satellite orbit (NGSO) system, from November 3, 2023, to November 3, 2024, based on continued COVID-19 related delays beyond Space Norway's control.¹ Grant of this extension will allow additional time for completion of construction and launch of the Arctic Satellite Broadband Mission (ASBM) system and support Space Norway's goal of providing broadband Internet access to unserved and underserved communities in northern Alaska.

### II. BACKGROUND

2. On November 3, 2017, the Commission granted Space Norway access to the U.S. market for the proposed ASBM system, consisting of two satellites in high Earth orbit intended to serve the Arctic region.<sup>2</sup> Space Norway's grant included standard milestone and bond conditions.<sup>3</sup> By November 3, 2023, Space Norway was required to launch 50% of its approved constellation (i.e., one satellite), place it in its assigned orbit, and operate it in accordance with the grant of market access.<sup>4</sup> Failure to meet this

<sup>&</sup>lt;sup>1</sup> Space Norway Petition for Modification of Grant of U.S. Market Access for the Arctic Satellite Broadband Mission to Extend or Waive Milestone Date, ICFS File No. SAT-MPL-20230308-00049 (filed Mar. 8, 2023) (Extension Petition).

<sup>&</sup>lt;sup>2</sup> Space Norway Petition for a Declaratory Ruling Granting Access to the U.S. Market for the Artic Satellite Broadband Mission, Order and Declaratory Ruling, 32 FCC Rcd 9649 (2017) (Space Norway Order). The ASBM system is licensed by Norway. *Id.* at 9650, para. 2. Space Norway was granted U.S. market access to operate in the 10.7-12.7 GHz (space-to-Earth), 14-14.5 GHz (Earth-to-space), 19.7-20.2 GHz (space-to-Earth), and 29.5-30 GHz (Earth-to-space) bands. *See id.* at 9650, para. 2, 9659-60, paras. 23-25. On March 11, 2022, Space Norway surrendered its market access in the 10.7-12.7 GHz and 14-14.5 GHz bands. *Space Norway Petition for Modification of Grant of U.S. Market Access for the Arctic Satellite Broadband Mission*, ICFS File No. SAT-MPL-20220311-00029 (granted in part and deferred in part February 23, 2023). Related to its partial surrender, Space Norway requested waivers of its milestone and bond requirements. *Id.* That request is not addressed in this order and declaratory ruling and remains pending.

<sup>&</sup>lt;sup>3</sup> See Space Norway Order, 32 FCC Rcd at 9661, para. 29; 47 CFR §§ 25.164(b), 25.165(a)(1), (b).

<sup>&</sup>lt;sup>4</sup> See Space Norway Order, 32 FCC Rcd at 9661, para. 29; 47 CFR § 25.164(b)(1).

milestone would result in automatic cancellation of Space Norway's market access and forfeiture of its surety bond.<sup>5</sup>

- 3. On March 8, 2023, Space Norway filed the present petition for declaratory ruling to extend the deadline for launch and operation of its first satellite by one year, from November 3, 2023, to November 3, 2024.<sup>6</sup> Space Norway states that during the construction of the ASBM system it faced extenuating and unforeseeable circumstances that affected its ability to meet the milestone deadline, including production-related delays with the satellite manufacturer and the COVID-19 pandemic, and that unique and overriding public interest considerations warrant the extension.<sup>7</sup>
- According to Space Norway, in June 2019, it entered into a satellite purchase agreement with Northrop Grumman for the construction of the two satellites for the ASBM system.<sup>8</sup> The same year, Space Norway entered into a launch services agreement with SpaceX.9 The launch period was initially set for December 1, 2022 to March 31, 2023. 10 Space Norway also notes that SES and Intelsat entered into separate contracts with Northrop Grumman for the construction of satellites to support the Commission's C-band spectrum clearing effort and asserts that since the C-band satellites had an earlier launch date, resources were diverted to the C-band project delaying construction of the ASBM System.<sup>11</sup> From 2020 to 2022, however, nineteen of Northrop Grumman's subcontractors terminated their contracts with Northrop Grumman because the COVID-19 pandemic affected their ability to timely fulfill their obligations to provide components related to the ASBM System. 12 In addition, Northrop Grumman's Assembly, Integration, and Test teams experienced several COVID-19 outbreaks, delaying the ASBM system's construction schedule.<sup>13</sup> Northrop Grumman also suffered delays of more than a year due to an industry alert on reaction wheels, which according to Space Norway is a critical payload and spacecraft component.<sup>14</sup> Space Norway asserts that this was detrimental to the construction timeline for the ASBM system satellites because of the design-driven requirement to assemble all parts and components in a specific sequence.15
- 5. Notwithstanding these disruptions, Space Norway states that construction of both ASBM satellites is expected to be completed by mid-November 2023, and that they will be launched together on one Falcon 9 launch vehicle, with an assigned launch period of October 1, 2023, to January 31, 2024.<sup>16</sup>

<sup>10</sup> *Id*.

<sup>11</sup> *Id*.

<sup>12</sup> *Id*.

<sup>13</sup> *Id*.

<sup>14</sup> Id. at 2-3.

<sup>15</sup> *Id*. at 3.

<sup>16</sup> *Id.* at 7.

<sup>&</sup>lt;sup>5</sup> See Space Norway Order, 32 FCC Rcd at 9661, para. 29; 47 CFR § 25.165(c).

<sup>&</sup>lt;sup>6</sup> In the alternative, Space Norway requests waivers of the bond and milestone requirements in sections 25.164(b)(1) and 25.165(c). Extension Petition, Narrative at 2. Space Norway describes a number of challenges that led it to be unable to meet the milestone, several importantly due to the COVID-19 pandemic.

<sup>&</sup>lt;sup>7</sup> Extension Petition, Narrative at 1-2. Space Norway's Extension Petition was placed on public notice on April 14, 2023. *Space Station Applications Accepted for Filing*, Public Notice, Report No. SAT-01716 (rel. Apr. 14, 2023). No comments were filed.

<sup>&</sup>lt;sup>8</sup> Extension Petition, Narrative at 2.

<sup>&</sup>lt;sup>9</sup> *Id*.

Space Norway also states that it has paid all obligated costs to its satellite and ground station suppliers and has paid 95% of the total launch costs.<sup>17</sup>

### III. DISCUSSION

- 6. The Commission's rules allow for a milestone extension when the delay is due to unforeseeable circumstances beyond the applicant's control, or when there are unique and overriding public interest concerns that justify an extension.<sup>18</sup> The unforeseeable circumstances in this instance are attributed to the COVID-19 pandemic, which the Commission has acknowledged is a unique and unusual circumstance that resulted in widespread delays in the receipt of communications equipment and caused delays in network construction.<sup>19</sup> Further, it recognized that various stay-at-home orders, necessary for public health and safety, have created "gaps in all phases of the supply and deployment chain."<sup>20</sup> As a result, we find that Space Norway's claims with respect to supply chain and human resource disruptions and consequent construction and delivery delays to be generally credible.
- 7. The policy objective of the Commission's milestone rules is to ensure that grantees proceed with the construction and launch of their satellites in a timely manner so that valuable spectrum will not be held to the exclusion of others by those unwilling or unable to proceed. We find no basis to conclude that Space Norway is unable or unwilling to proceed with completion of its first satellite, but rather that the record presented demonstrates substantial expenditures and concrete progress toward imminent completion of the entire ASBM system.
- 8. In light of these factors, grant of an extension will serve the public interest by allowing Space Norway to promptly launch and begin operating its ASBM system within the milestone period. We condition this extension on Space Norway also having its bond requirement extended. The bond requirement was adopted to establish a market-based mechanism for ensuring that grantees are willing and able to proceed with satellite construction and to discourage warehousing of scarce resources.<sup>21</sup> An extension of the bond is consistent with and supports the Commission's policy of using a market-based approach toward ensuring that grantees complete construction and not warehouse scarce resources.<sup>22</sup>

## IV. CONCLUSION AND ORDERING CLAUSES

9. Accordingly, IT IS ORDERED that Space Norway's request to extend the milestone date to launch and operate 50% of its approved Arctic Satellite Broadband Mission system from November 3,

<sup>&</sup>lt;sup>17</sup> *Id*.

<sup>&</sup>lt;sup>18</sup> 47 CFR § 25.117(e). An applicant must also justify the precise extension period requested. *Id.* 

<sup>&</sup>lt;sup>19</sup> Viasat Inc., Request to Extend or Waive Milestone Date, Order, DA 22-1141, para. 7 (IB 2022); Waiver of FCC Rule Sections 1.946 (c) and (d) for Wireless Site-Based and Mobile-Only System, Order, 35 FCC Rcd 3536, 3536-3539, paras. 2-5 (WTB, PSHSB 2020) (Waiver of 1.946); Request for Waiver by the Schools, Health & Libraries Broadband (SHLB) Coalition, Order, 36 FCC Rcd 9956, 9958-59, paras. 4-7 (WCB 2021) (SHLB Coalition).

<sup>&</sup>lt;sup>20</sup> Waiver of 1.946, 35 FCC Rcd at 3537, paras. 4-5; SHLB Coalition, 36 FCC Rcd at 9958, para. 4 ("[T]he impacts of the virus are still being felt. For example, widespread delays in the receipt of 'communications equipment of all kinds, which extends not only to electronics (such as routers, optical network terminals, and customer premises equipment (CPE)) but also fiber' is causing delays in network construction. The impact of the pandemic is causing delays in construction projects across the country.").

<sup>&</sup>lt;sup>21</sup> Amendment of the Commission's Space Station Licensing Rules and Policies, First Order on Reconsideration and Fifth Report and Order, 19 FCC Rcd 12637, 12645, para. 17 (2004).

<sup>&</sup>lt;sup>22</sup> *Id.* at 12646, para. 19. We modify the bond beyond the regular six-year period to continue the escalation of the bond through November 3, 2024. The specific bond requirement included in the conditions of this grant requires that the bond amount continue to increase at the same rate as specified under our rules. For a bond coming due on November 3, 2024, this results in a total required bond amount of \$5,670,000. The escalation of the bond value beyond the regular six-year period is a simple extrapolation of the linear increase. *See* 47 CFR § 25.165(a)(1).

2023, to November 3, 2024, IS GRANTED pursuant to sections 0.51, 0.261, 25.117(e)(1), and 25.137 of the Commission's Rules, 47 CFR §§ 0.51, 0.261, 25.117(e)(1), 25.137.

- 10. Space Norway must launch 50% of the maximum number of space stations approved for service, place them in their assigned orbits, and operate them in accordance with the grant of market access no later than **November 3, 2024**. See 47 CFR § 25.164(b)(1).
- 11. Space Norway must maintain a surety bond requiring payment in the event of default as defined in section 25.165(c) of the Commission's rules, in an amount, at a minimum, determined according to the following formula, with the resulting dollar amount rounded to the nearest \$10,000: A = \$5,000,000 + \$4,000,000 \* D/2192, where A is the amount to be paid and D is the lesser of 366 or the number of days that elapsed from November 3, 2023 until the date when the grant was surrendered.
- 12. This grant of U.S. market access will be null and void automatically, without further Commission action, if Space Norway fails to comply with any of these requirements. Failure to comply with the milestone requirement of 47 CFR § 25.164(b)(1) will also result in forfeiture of Space Norway's surety bond. By **November 18, 2024**, Space Norway must either demonstrate compliance with its milestone requirement or notify the Commission in writing that the requirement was not met. *See* 47 CFR § 25.164(f).

FEDERAL COMMUNICATIONS COMMISSION

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