

EXHIBIT 1
NARRATIVE DESCRIPTION OF PROPOSED MODIFICATION
(TERM EXTENSION REQUEST)
(Response to Question 43)

Pursuant to Section 25.117(d) and 25.121(f) of the Commission's rules,¹ DISH Operating L.L.C. ("EchoStar") files this application to extend its authority to operate the EchoStar 18 spacecraft (S2931) as an in-orbit spare at the 61.35° W.L. orbital location until October 4, 2036.² EchoStar 18 was placed into orbit at 61.35° W.L. on October 4, 2016, following testing at Canadian orbital locations.³ Grant of this application will serve the public interest by allowing EchoStar to manage its satellite fleet as efficiently as possible.

Specifically, because the original EchoStar 18 license expires on October 4, 2026, EchoStar requests a term extension of this license to continue to operate the spacecraft at 61.35° W.L. until October 4, 2036,⁴ consistent with the satellite's expected end of life.⁵ In support of its request, EchoStar certifies that the spacecraft is operating normally without any indication of any single points of failure or other malfunctions, defects, or anomalies during the space station operation that could affect its ability to conduct end-of-life procedures as planned.⁶ Consistent with its updated estimate of the satellite's propellant consumption and end of life, EchoStar has

¹ 47 C.F.R. § 25.117(d); 47 C.F.R. § 25.121(f).

² EchoStar is requesting the modification to renew and extend its authority to operate EchoStar 18 as an in-orbit spare at the nominal 61.35° W.L. orbital location. 47 C.F.R. § 25.121(f)(2). This application qualifies as a minor modification because it proposes no change to orbital location or authorized frequencies, nor will it increase the potential for interference.

³ Letter from Alison Minea, DISH, to Jose Albuquerque, FCC, File No. SAT-MOD-20160722-00067 (Oct. 4, 2016). EchoStar 18 was originally licensed at the nominal 119° W.L. orbital location but that grant was modified before the satellite was placed into orbit at that location. See DISH Operating L.L.C., File No. SAT-MOD-20160722-00067 (granted Sept. 8, 2016).

⁴ 47 C.F.R. § 25.121(f)(i).

⁵ 47 C.F.R. § 25.121(f)(ii).

⁶ 47 C.F.R. § 25.121(f)(iii).

calculated that there is sufficient propellant onboard the EchoStar 18 spacecraft for continued operation and to complete end-of-life disposal as planned by the end of the requested term extension.⁷ EchoStar uses multiple manufacturer recommended propellant accounting methods for determining propellant consumption and end-of-life estimates. All propellant accounting methods deduct propellant needed for end-of-life maneuvers, unusable propellant, and worst-case uncertainty. In addition, the satellite's Tracking, Telemetry, and Control functions and other subsystems are operating normally.⁸

Grant of this application will serve the public interest by continuing to allow EchoStar to operate EchoStar 18 as an in-orbit spare, thus maintaining the reliability and redundancy of its satellite fleet and ensuring continuity of satellite television services for the benefit of U.S. consumers. It also will provide EchoStar with greater flexibility to manage its satellite fleet efficiently, consistent with the Commission's long-standing policy of leaving fleet management decisions to satellite operators.⁹ Consequently, the proposed operations will allow EchoStar to continue to satisfy service demands and ensure sufficient available capacity for its satellite television network.

⁷ 47 C.F.R. § 25.121(f)(iv).

⁸ 47 C.F.R. § 25.121(f)(v).

⁹ See AMSC Subsidiary Corporation, *Order and Authorization*, 13 FCC Rcd. 12316, 12318 ¶ 8 (1998) (the satellite licensee "is in a better position to determine how to tailor its system to meet the particular needs of its customers," and the Commission "will generally grant a [satellite] licensee's request to modify its system, provided there are no compelling countervailing public interest considerations"); SES Americom, Inc., *Order and Authorization*, 21 FCC Rcd. 3430, 3433 ¶ 8 (2006) (FCC "generally has allowed satellite operators to rearrange satellites in their fleet to reflect business and customer considerations where no public interest factors are adversely affected").

A completed Form 312 is attached and EchoStar incorporates by reference the technical information previously provided regarding the operations of EchoStar 18.¹⁰ The proposed modification will not result in any changes to the spacecraft's operating characteristics or to the interference environment.

Accordingly, EchoStar requests that the Commission grant an extension of EchoStar 18's license term through October 4, 2036, consistent with its prior grant and the public interest.

¹⁰ DISH Operating L.L.C., File No. SAT-MOD-20160722- 00067 (granted Sept. 8, 2016) (granting modification for S2931/EchoStar 18 to move to and operate as in-orbit spare at 61.35° W.L.). DISH Operating L.L.C., File No. SAT-LOA-20141002-00105 (granted Mar. 12, 2015) (granting initial authority to launch and operate S2931/EchoStar 18).