



August 4, 2015

Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: The FCC's Two-Degree Spacing Policy is Essential to Ensure the Most Efficient Use of the Spectrum and Orbital Resource and Enable the Introduction of Innovative Competitive Satellite Services; IB Docket No. 12-267

Dear Ms. Dortch:

As the record in this proceeding clearly demonstrates, the Federal Communications Commission ("FCC" or "Commission") should retain its two-degree spacing policy because it makes the most efficient use of the orbit/spectrum resource and creates certainty as to what level of service operators are able to provide at a particular orbital location.¹

Suggestions to abandon two-degree spacing entirely and instead rely on operator-to-operator agreements and coordination should be rejected.² The Commission's two-degree spacing policy, as foreshadowed by the FCC when it was adopted, has been successful as demonstrated by the robust U.S. satellite communications marketplace. Abandoning or modifying the two-degree policy, as proposed by some proponents, will lead to an inefficient use of spectrum and harm consumers as less competitive choices for satellite service will be

¹ See IB Dkt No. 12-267, Comments of SES Americom, Inc. and New Skies Satellites B.V., at 2-3 (filed Jan. 29, 2015); IB Dkt No. 12-267, Reply Comments of SES Americom, Inc. and New Skies Satellites B.V., at 2-6 (filed Mar. 3, 2015); IB Dkt No. 12-267, Comments of DIRECTV, LLC, at 6 (filed Jan. 29, 2015); IB Dkt No. 12-267, Reply Comments of Viasat, Inc., at 6-8 (filed Mar. 3, 2015).

² IB Dkt No. 12-267, Comments of Intelsat License, LLC, at 20, 27 (filed Jan. 29, 2015) ("Intelsat Comments").

available with United States coverage.³ Specifically, abandonment of the two-degree spacing policy will likely result in a less efficient use of the orbit/spectrum resource.

It is important to recall that at the core of the two-degree spacing policy are the blanket *license* provisions, not blanket *coordination* provisions for earth stations across the United States. These provisions allow for rapid deployment and startup of a service that is guaranteed in the granted license which could no longer exist if the two-degree policy is discarded. Instead, if the two-degree policy is abandoned, licensees would have no certainty on whether they could coordinate their space station. This will limit the ability of new entrants to enter the market, retarding competition in the marketplace. Intelsat, the lone advocate for elimination of the two-degree spacing rules, fails to address how without two-degree spacing existing operators will be incentivized to reach an agreement with a lower priority new entrant. Rather, experience tells us that the operator with the priority is incentivized to maintain status quo, which means new entrants are kept out and consumers suffer from a less competitive marketplace. Such a result is contrary to the purpose of the two-degree spacing policy, which the FCC implemented to incentivize the entry of new operators.⁴

In addition, Intelsat's allegation that two-degree spacing does not allow the deployment of high-powered services is false.⁵ In fact, EchoStar has deployed blanket licensed operations on high-power satellites across the U.S. arc, all operating in a two-degree spacing environment. Intelsat's claim of limits on these services because of coordination requirements is a risk that all operators run in any coordination environment. Accordingly, in an environment where operator coordination agreements are the only mechanism to enable access to the orbital and spectrum resource, it is likely that more abuse, not less abuse, will occur resulting in actual limits on high-power services. Moreover, high-power satellite operations are not limited by two-degree spacing. Rather, the earth station antenna performance dictates what "optimal" orbital spacing is required. Adjacent satellites operating at equal power have zero impact on the adjacent satellite interference calculation – the antenna off-axis performance is the only relevant variable. As earth station antennas become smaller, the off-axis rejection of adjacent satellite interference decreases. However, new research and new technologies push the industry forward such that small, low profile antennas can and do function successfully in a two-degree environment. These innovations are the needed change – not the FCC's two-degree spacing policy – and they are happening every day.

EchoStar does not agree that two-degree spacing policy disadvantages U.S. licensed operators. EchoStar is a U.S.-licensed operator and fully supports the continuation of the two-degree spacing policy. As the orbital resource over the United States becomes increasingly

³ See *FCC Seeks Public Comment on Report on Process Reform*, Report, 29 FCC Rcd 1338, 1412 (2014); *Comprehensive Review of Licensing and Operating Rules for Satellite Services*, Further Notice of Proposed Rulemaking, 29 FCC Rcd 12,116, 12,130 ¶ 36 (2014) ("*FNPRM*").

⁴ *Id.*

⁵ Intelsat Comments at 20.

crowded, the two-degree spacing policy becomes increasingly important to ensure this resource is used most efficiently. All Intelsat's proposal would achieve is to bar new entrants from competing against its existing services blocking the introduction of innovative services to U.S. consumers. Intelsat, as a former monopoly operator with the oldest and most senior U.S. filings, stands the most to gain from elimination of the two-degree spacing policy. Accordingly, a crowded orbital arc demands rules to enable the most efficient use of this scarce resource, which the two-degree spacing policy enables.

EchoStar also does not support the Intelsat and DIRECTV proposal that an earlier-in-time licensee should escape the two-degree spacing policy because they chose to take the risk of a non-compliant operation.⁶ While EchoStar recognizes the requirement to conform operations to two-degree spacing at a later date could be burdensome, the FCC's rules are clear – operations are subject to two-degree spacing. U.S.-licensed operators who fail to operate in a manner consistent with two-degree requirements should not be rewarded at the cost of new entrants. This would favor existing licensees and disadvantage every future applicant. Further, DIRECTV's proposal to require the new entrant then to conform to two-degree spacing further demonstrates the disparity of such a requirement. The new entrant will be further constrained than the FCC's rules allow in offering new and innovative services to its customers, providing a competitive advantage to the incumbent operator who only benefits because it is first in time. The FCC's two-degree spacing requirements are clear, and in fact, allowing such changes when it could negatively impact other operators who currently are or are planning to operate in a two-degree compliant manner is exactly the harm that the Commission's two-degree policy was aimed at stopping.⁷

⁶ See DIRECT TV Reply Comments at 5; Intelsat Comments at 26. DIRECTV and Intelsat's proposal suffers further from the lack of notice that will be available to a new entrant of such non-compliant use.

⁷ *FNPRM*, 29 FCC Rcd at 12,130 ¶ 36.

Ms. Dortch
August 4, 2015
Page 4 of 4

Retaining two-degree spacing is in the public interest because it incentivizes competition by better enabling new entrants, and it provides clear certainty as to: (1) the allowed operating level of the new entrant's service; (2) the interference environment from neighboring licensees; and (3) most importantly, the most efficient use of the orbit/spectrum resource. While licensees may ultimately deviate from two-degree spacing parameters through provisions defined in the Commission's rules, that is not enough of a reason to eliminate the rule altogether because all parties benefit from that initial level of certainty. While EchoStar understands that operators may want to provide higher-powered services than current two-degree spacing rules allow, such services should not come at a cost of increased uncertainty of the interference environment for service providers, which would harm the public interest by decreasing of the availability of competitive services to U.S. consumers. Accordingly, the Commission should maintain two-degree spacing to ensure the most efficient use of the orbit/spectrum resource, while also bringing the most competitive and innovative services to U.S. consumers.

Sincerely,

/s/ Jennifer A. Manner
Vice President, Regulatory Affairs
EchoStar Satellite Operating Corporation
and Hughes Network Systems, LLC
11717 Exploration Lane
Germantown, MD 20876

cc: Jose Albuquerque (FCC)
Kerry Murray (FCC)
Diane Garfield (FCC)
Stephen Duall (FCC)
Kathryn Medley (FCC)