December 10, 2015

FILED ELECTRONICALLY

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Written *Ex Parte* Presentation, Comprehensive Review of the Licensing and Operating Rules for Satellite Services, IB Docket No. 12-267

Dear Ms. Dortch:

EchoStar Satellite Operating Corporation and Hughes Network Systems, LLC (collectively, "EchoStar"), Eutelsat Americas ("EAS"), and SES Americom, Inc. ("SES," and with EchoStar and EAS, the "Satellite Companies") urge the Commission to retain the two-degree spacing policy, which for over thirty years has benefited U.S. consumers by facilitating a competitive satellite market and the efficient use of orbital resources. The Commission should continue to apply its policies in a fair and transparent manner by ensuring that any new satellite can operate at two-degree compliant levels. The Commission should also modernize the two-degree spacing framework by adjusting the default power levels upward to reflect typical operating parameters for today's spacecraft.

The Commission's Long-Standing Two-Degree Spacing Policy Is Essential to Promote Competition in the U.S. Satellite Marketplace

The record in this proceeding clearly demonstrates that the Commission should not disturb its two-degree spacing policy, which has played a critical role in the creation of a highly-competitive U.S. satellite market.[1] The only dissent has come from Intelsat, which would directly benefit at the expense of other satellite operators by elimination or a radical alteration of this policy. But even Intelsat acknowledges that two-degree spacing is a success, stating that it has "maximiz[ed] the number of entrants serving the United States."[2] That is exactly the reason the Commission adopted two-degree spacing more than three decades ago – to meet U.S. customers' demand for satellite services and ensure that "both existing operators and new

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[1] *See* Comments of DIRECTV, LLC, IB Dkt No. 12-267 (filed Jan. 29, 2015) ("DIRECTV Comments") at 6-7; Comments of EchoStar Satellite Operating Corporation and Hughes Network Systems, LLC, IB Dkt No. 12-267 (filed Jan. 29, 2015) at 30-31; Comments of Iridium Constellation LLC, IB Docket No. 12-267 (filed Jan. 29, 2015) at 3-4; Joint Comments of SES Americom, Inc. and New Skies Satellites B.V., IB Docket No. 12-267 (filed Jan. 29, 2015) ("SES Comments") at 3-6; Joint Reply Comments of SES Americom, Inc. and New Skies Satellites B.V., IB Docket No. 12-267 (filed Mar. 2, 2015) at 1-6; Reply Comments of ViaSat, Inc., IB Docket No. 12-267 (filed Mar. 3, 2015) at 6-8.

[2] Intelsat Notice of Oral *Ex Parte* Presentation, IB Docket No. 12-267 (filed Nov. 16, 2015) (the "Intelsat Letter").

entrants [can] satisfy growing user requirements with a minimum of administrative costs and delay."[3]

The evidence before the Commission shows that the policy is every bit as valuable today as it was when the Commission adopted it. In fact, as the number of available orbital locations capable of providing U.S. service becomes increasingly limited, the two-degree spacing framework is more important than ever to ensure that new satellites can be introduced at the prescribed power levels without being stymied by overly conservative ITU coordination criteria.[4]

In contrast, Intelsat has not presented any evidence justifying a change in the policy. Intelsat makes a baseless claim that the policy disadvantages U.S.-licensed satellites.[5] However, a simple review of its decisions shows that the Commission applies two-degree spacing requirements on an even-handed basis to all satellite applicants seeking to serve the U.S.[6]

The Commission's two-degree spacing framework continues to serve the public interest by ensuring optimum use of orbital and spectrum resources and facilitating the introduction of new satellites to meet customer requirements. All parties acknowledge that the policy has resulted in robust use of the orbital arc over the U.S., and that in turn has created a vibrantly competitive market that benefits all satellite service customers. Accordingly, the Commission should retain the two-degree spacing policy.

Special Protection of Sensitive Links Would Undermine Two-Degree Spacing's Goals

The cornerstone to the success of two-degree spacing is the establishment of default operating parameters at which new satellites can operate pending coordination. Altering the policy to allow an incumbent claiming the need for special protection to block two-degree compliant entry would prevent other operators from benefiting from two-degree spacing, limiting competition in the U.S. market and resulting in inefficient use of orbital and spectrum resources. The Commission must not undermine its two-degree spacing policy in this manner.

Just like the broader proposal to change the two degree spacing policy, the idea of special protection is a solution in search of a problem. The alleged rationale for granting such protection is to ensure that incumbents who have established services using small antennas that may be particularly vulnerable to interference can maintain those services in a two-degree

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[3] *Licensing of Space Stations in the Domestic Fixed-Satellite Service and Related Revisions,* CC Docket No. 81-704, Report and Order, 48 FR 40233 (1983) at ¶ 1.

[4] *See, e.g.,* SES Comments at 5 ("as the satellite arc gets more congested, having a default set of operational standards becomes even more important to lay the groundwork for additional entry"); EchoStar Written *Ex Parte* Presentation, IB Docket No. 12-267 (filed Aug. 4, 2015) at 2-3 (as the orbital arc over the U.S. "becomes increasingly crowded, the two-degree spacing policy becomes increasingly important to ensure this resource is used most efficiently").

[5] Intelsat Letter at 1. Intelsat then makes the contradictory argument that two-degree spacing could also disfavor foreign licensees relative to U.S. operators. *Id*.

[6] *See, e.g., SES Americom, Inc.*, File No. SAT-MOD-20140207-00020, grant-stamped April 10, 2014, Attachment to Grant at 3, ¶ 15; *New Skies Satellites B.V.*, File No. SAT-MPL-20130906-00114, grant-stamped Feb. 4, 2014, Attachment to Grant at 3, ¶ 11; *Hispasat, S.A.*, File No. SAT-PPL-20130430-00064, grant-stamped Dec. 20, 2013, Attachment to Grant at 1, ¶ 4; *Intelsat License LLC*, File No. SAT-MOD-20120713-00110, grant-stamped May 21, 2014, Attachment to Grant at 2-3, ¶ 7.

spacing environment. However, the record contains no evidence to suggest that such services are threatened under current policy. To the contrary, it is clear that numerous satellite operators including Intelsat, the chief advocate for this policy change, have been able to successfully deploy and maintain mobility services and other small-antenna offerings under the two-degree spacing framework.[7] For example, Gogo's aeronautical license allows the use of spacecraft operated by Intelsat, SES, and EAS, among others, including spacecraft two degrees away from co-coverage, co-frequency adjacent satellites.[8] Accordingly, there is no basis for modifying existing policy.

A rule change to allow such special protection would likely be subject to abuse by incumbents seeking to block competitors. Giving an incumbent an effective veto over a two-degree compliant adjacent satellite's entry rights would thwart the regulatory certainty that the baseline two-degree operating levels were designed to confer and could ultimately threaten the ability of the satellite industry to innovate by making it impossible to introduce higher powered operations.

Instead, the Commission should reaffirm that every satellite "should be entitled to operate at the parameters allowed under the Commission's two-degree spacing policy."[9] An incumbent that chooses to implement especially vulnerable links does so at its own risk and should not be permitted to evade that risk by imposing obstacles to new satellite deployment.

The Default Two-Degree Spacing Levels Should Be Increased

As discussed above, the two-degree spacing framework has played a critical role in the development of a robustly competitive domestic satellite marketplace and continues to be essential in order to ensure efficient use of orbital and spectrum resources. However, over time a disconnect has developed between the levels set forth in the two-degree rules and those routinely in use by spacecraft serving the United States. Revising the levels upward will bring reduce that gap and ensure that new entrants have the opportunity to commence services at reasonable operating parameters without the need for coordination with neighboring satellites, which can be a lengthy and difficult process.

Specifically, the Commission should implement the increases SES proposed in its initial comments, setting the levels at 3 dBw/4 kHz for digital carriers in the conventional and extended C-bands and 13 dBW/4 kHz for digital carriers in the conventional and extended Ku-bands.[10] These proposed updated levels strike the appropriate balance by bringing the default levels closer to those in use currently, while still maintaining an incentive for satellite operators to engage constructively in coordination discussions with their neighbors.[11]

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[7] *See, e.g.,* Notice of Oral *Ex Parte* Presentation of SES Americom, Inc. EchoStar Satellite Operating Corporation and Hughes Network Systems, LLC, IB Docket No. 12-267 (filed July 27, 2015) at 2 (SES and EchoStar "each offer services today using small antennas and have been able to successfully coordinate those operations in a two-degree spacing environment").

[8] *See Gogo LLC,* Call Sign E120106, File No. SES-MFS-20140801-00625, granted Dec. 22, 2014.

[9] DIRECTV Comments at 7.

[10] *See* Joint Comments of SES Americom, Inc. and New Skies Satellites B.V., IB Docket No. 12-267 (filed Jan. 29, 2015) at i & 6-7.

[11] *See* SES Written *Ex Parte* Presentation, IB Docket No. 12-267 (filed July 21, 2015).

Absent an increase, new satellites will be constrained to operate at levels that are well below those in use by neighboring spacecraft, impairing the new satellites' ability to offer competitive services. Accordingly, in the event the Commission decides not to implement the requested across-the-board increase, it should consider an alternative means to allow a new satellite to employ power levels that will permit realistic operations pending the completion of coordination. In particular, when a new satellite is being introduced next to an incumbent that is operating above two-degree baseline levels, the Satellite Companies suggest that the Commission allow the new satellite to operate at levels halfway between the two-degree levels and the incumbent's operating levels.[12] Such a measure would reduce the disadvantage the new entrant will otherwise suffer as a result of the ever-widening gap between the codified two-degree levels and those in use by most current satellites.

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Two-degree spacing is a success story, promoting competition and efficient use of spectrum and orbital resources. The Commission should maintain the policy and should not undercut it by restraining compliant new operations in order to protect especially vulnerable services. By updating the two-degree framework to allow higher baseline levels, the Commission will ensure that the two-degree spacing policy continues to serve the important objective of facilitating new entry and technological innovations by satellite operators.

Respectfully submitted,

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[12] *See* SES Notice of Oral *Ex Parte* Presentation, IB Docket No. 12-267 (filed May 13, 2015) at 3.