

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
Application of Astro Digital U.S., Inc. for) File No. SAT-LOA-20170508-00071
Authority to Launch and Operate a Non-)
Geostationary Satellite Orbit System in)
the Earth-Exploration Satellite Service)
)

PETITION TO DENY OF TELESAT CANADA

In the above-captioned Application, Astro Digital U.S., Inc. (“Astro Digital”) seeks a license for a new planned non-geostationary satellite orbit (“NGSO”) satellite system in the Earth-Exploration Satellite Service that would operate in the Ka-Band. Telesat Canada (“Telesat”) files this Petition to Deny for the reasons specified below.

I. INTRODUCTION AND SUMMARY

The frequencies proposed by Astro Digital overlap with the 29.9-30 GHz frequency band that Innovation, Science and Economic Development Canada (“ISED”) has authorized Telesat to use for its NGSO network.¹ Telesat also has pending before the Commission a request for market access to the United States in this frequency band.² Astro Digital’s system would interfere with Telesat’s NGSO operations because the two systems would operate in overlapping geographical areas on overlapping Ka-

¹ Telesat Approvals in Principle, ISED file 3150-1 (557203 AT) dated June 26, 2015, and ISED file 3150-1 (565832 SS) dated June 26, 2015, for the 27.5 – 29.1, 29.5 – 30, 17.8 – 19.3, and 19.7 – 20.2 GHz bands.

² *Telesat Canada, Petition for Declaratory Ruling to Grant Access to the U.S. Market for Telesat’s NGSO Constellation*, File No. SAT-PDR-20161115-00108 (filed Nov. 15, 2016).

band frequencies.

The Commission should deny Astro Digital's Application because: (i) its proposal to use the 29.9-30 GHz frequency band is inconsistent with the Commission's band plan for those frequencies; and (ii) Astro Digital has not justified operations that are inconsistent with the Commission's band plan.

I. ASTRO DIGITAL'S PROPOSAL IS INCONSISTENT WITH THE COMMISSION'S BAND PLAN

Astro Digital's proposed use of the 29.9-30 GHz frequency band for Earth-Exploration Satellite Service is not authorized under the Commission's Ka-band plan, which governs operations in the Ka-band.³ The Commission adopted the band plan based on its determinations as to which services are compatible. While the Commission is now in the process of amending its rules governing NGSO fixed-satellite service constellations, which may result in some adjustments to that Ka-band plan, there is no suggestion that those changes will result in a new allocation for the Earth-Exploration Satellite Service in the band in question.⁴

Astro Digital makes no mention of the Commission's Ka-band plan, much less does it request a waiver of the band plan. Astro Digital's Application, therefore, is facially deficient. For that reason alone, the Commission should deny the Application.

³ The Commission's current Ka-band plan, updated to reflect all amendments, is shown in Appendix B to the Notice of Proposed Rulemaking. *See, Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed Satellite Service Systems and Related Matters, IB Docket No. 16-408, Notice of Proposed Rulemaking, FCC 16-170, Appendix B (rel. Dec. 15, 2016)* ("NPRM Appendix B").

⁴ *See Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters, Draft Report and Order and Further Notice of Proposed Rulemaking, IB- Docket No. 16-408, FCC-CIRC1709-04, (rel. Sept 7, 2017)* ("draft Report and Order").

II. ASTRO DIGITAL HAS NOT JUSTIFIED OPERATIONS THAT ARE INCONSISTENT WITH THE COMMISSION'S BAND PLAN

Operations that are inconsistent with the Commission's band plan are considered a "non-conforming use." The proponent of a non-conforming use must, among other things, demonstrate it will not interfere with authorized services.⁵

Astro Digital never even acknowledges that it is proposing a non-conforming use and, therefore, while it states that, "we will cease operations if we cause interference,"⁶ offers no showing whatsoever as to how it will avoid interference to authorized services in the band.

Although Astro Digital requests a waiver of the U.S. Table of Frequency Allocations, moreover, here too it makes no showing to justify such a waiver, including any mention of how it will avoid interference to other services in the band.⁷ Curiously, Astro Digital's Application includes extensive showings concerning non-interference in other bands,⁸ but ignores this obligation for the 29.9-30 GHz band.

⁵ See *Application of Fugro-Chance, Inc.*, Order and Authorization, 10 FCC Rcd 2860, ¶ 2 (IB 1995). See also *Hughes Network Systems, LLC*, Declaratory Ruling, 26 FCC Rcd 8521 & n. 1, ¶¶ 12-14 (IB 2011); *Boeing Company*, Order and Authorization, 16 FCC Rcd 5864, ¶¶ 8-9, 12 (IB and OET 2001).

⁶ See *Application of Astro Digital U.S., Inc. for Authority to Launch and Operate a Non-Geostationary Satellite Orbit System in the Earth-Exploration Satellite Service*, IBFS File No. SAT-LOA-20170508-00071, Exhibit 43 at 52 (filed May 5, 2017).

⁷ *Id.*

⁸ *Id.* at 28-35 and Attachment E.

III. CONCLUSION

For the reasons stated herein, Astro Digital's Application should be denied.

Respectfully submitted,

TELESAT CANADA

/s/ _____

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September 25, 2017

CERTIFICATE OF SERVICE

I hereby certify that on this 25th day of September, 2017, a copy of the foregoing Petition to Deny of Telesat Canada was sent by first-class, United States mail to the following:

Mr. Jan A. King
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/s/ _____
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