

COPY

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

In the matter of)
)
EchoStar Satellite L.L.C.)
)
Application to Construct, Launch, and)
Operate a Direct Broadcast Satellite at)
the 86.5° W.L. Orbital Location)

File No. SAT-LOA-20030609-00113
Call Sign S2454

FILED/ACCEPTED

DEC 29 2006

Federal Communications Commission
Office of the Secretary

APPLICATION FOR REVIEW

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December 29, 2006

SUMMARY

Telesat Canada ("Telesat") requests that the Commission review and reverse the International Bureau's *Order and Authorization* granting the application of EchoStar Satellite L.L.C. for authority to construct a "tweener" DBS satellite at 86.5° West Longitude and that EchoStar's application be dismissed.

The Bureau's decision conflicts with the Commission's rules, case precedent, and Commission policy. The Bureau failed to make findings required under the Commission's rules, and ignored the findings that it did make, all of which resulted in a grant of EchoStar's application that is legally unsupportable. In support of its request, Telesat establishes that:

- (i) EchoStar failed to demonstrate, and the International Bureau could not, therefore, make the requisite finding that EchoStar's proposed system could operate satisfactorily if all assignments in the BSS and feeder link plans were implemented;
- (ii) The conditions to which the Bureau subjected EchoStar's authorization are no substitute for the requisite finding of noninterference and will not protect against harmful interference to DBS systems;
- (iii) The Bureau should not have granted EchoStar's application until coordination with operators of existing Region 2 systems had been completed. At a minimum, the Commission should not permit EchoStar to commence operations until such coordination is concluded successfully; and
- (iv) The Bureau wrongly afforded less interference protection to Canadian DBS satellites authorized to serve the United States than it afforded to U.S.-licensed DBS satellites.

In light of the above and consistent with the Commission's standards for reviewing action taken by a bureau upon delegated authority, the Commission is required to set aside the International Bureau's decision and deny the EchoStar Application.

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APPLICATION FOR REVIEW

Telesat Canada (“Telesat”) hereby requests, pursuant to Section 1.115 of the Commission’s rules, that the Commission review and reverse the *Order and Authorization* issued by the International Bureau (the “Bureau”) granting the application of EchoStar Satellite L.L.C. (“EchoStar”) for authority to construct a Direct Broadcast Satellite (“DBS”) to be located at 86.5° West Longitude¹ and that EchoStar’s application (“EchoStar’s Application”) be dismissed. The Bureau’s decision conflicts with the Commission’s rules, case precedent, and Commission policy. The Bureau failed to make findings required under the Commission’s rules and ignored the findings that it did make all of which resulted in a grant of EchoStar’s Application that is legally unsupportable. More specifically, Telesat shows below:

- (i) EchoStar failed to demonstrate, and the International Bureau did not find and would have had no basis upon which to find, that EchoStar’s “proposed system could operate satisfactorily if all assignments in the BSS and feeder link Plans were implemented,”² which is an essential application requirement;

¹ *EchoStar Satellite L.L.C.*, Order and Authorization, DA 06-2440, 2006 FCC LEXIS 6304 (rel. Nov. 29, 2006) (the “*EchoStar Order*”).

² 47 C.F.R. § 25.114(d)(13)(i).

- (ii) The conditions to which the Bureau subjected EchoStar's authorization are no substitute for the requisite finding of noninterference and will not protect against harmful interference to DBS systems;
- (iii) The Bureau should not have granted EchoStar's Application until coordination with operators of existing Region 2 systems had been completed. At a minimum, the Commission should not permit EchoStar to commence operations until such coordination is concluded successfully; and
- (iv) The Bureau wrongly afforded less interference protection to Canadian DBS satellites authorized to serve the United States than it afforded to U.S.-licensed DBS satellites.

In light of the above and consistent with the Commission's standards for reviewing action taken by a bureau upon delegated authority, the Commission is required to set aside the International Bureau's decision and deny the EchoStar Application.

I. ECHOSTAR'S PROPOSED SATELLITE WOULD BE SHORT-SPACED TO, AND WOULD INTERFERE WITH, SERVICES PROVIDED BY TWO TELESAT SATELLITES.

Telesat is the Canadian-licensed satellite operator of DBS satellites operating at 91° and 82° W.L. that, through the Canadian DBS service provider, Bell ExpressVu, provides DBS service to more than 1.8 million households in Canada. Most of these subscribers live within 100 km of the U.S. border, and many, in the densely populated Southern Ontario region, live geographically south of the neighboring U.S. states of New York and Michigan.

Telesat demonstrated in its initial Opposition to EchoStar's Application that EchoStar's proposed satellite would disrupt existing services to subscribers and jeopardize billions of dollars

in satellite infrastructure.³ Telesat pointed out, moreover, that EchoStar's own analysis of the interference problem created by 4.5° short-spaced DBS satellites showed that EchoStar's proposed system would disrupt existing customer services on Telesat's satellites.⁴ Telesat also refuted EchoStar's assertion that it could avoid interference to DBS services operating on Telesat's satellites through beam shaping and power roll-off⁵. Telesat demonstrated that such techniques do not work in co-coverage situations, as is the case here.⁶ EchoStar did not dispute the validity of Telesat's interference analysis. Indeed, the Bureau acknowledged in its *EchoStar Order* that "to ensure adequate protection for the existing Canadian DBS operations at 82° and 91° W.L., very substantial reductions of the power levels on the proposed EchoStar satellite" would appear to be required.⁷

Furthermore, Telesat's satellites have been designed to provide coverage in the United States and have been approved by the Commission for the delivery of DBS services in the United States.⁸ The ITU Plan assignments for these satellites also have been modified to show coverage patterns that include the United States. The CAN-BSS1 and CAN-BSS2 satellite networks at 82W and 91.1W respectively, which have CONUS coverage, became part of the Region 2 BSS Plan as of 9 September 2003 with their publication in Part II of ITU-R IFIC 2502. The *EchoStar Order*, in this regard, appears to be based upon outdated information. Thus, while the *EchoStar Order* states that, "it would be located less than nine degrees from two Canadian DBS Satellites

³ See Opposition of Telesat Canada, File No. SAT-LOA-20030609-00113, at 3-5 (May 16, 2005) ("Telesat Opposition").

⁴ See Telesat Opposition at 4; Reply of Telesat Canada, File No. SAT-LOA-20030609-00113, at 3-5 (June 13, 2005) ("Telesat Reply").

⁵ EchoStar Application at 5 (June 9, 2003).

⁶ Telesat Opposition at 4-5.

⁷ *EchoStar Order* at ¶ 16, quoting Telesat Opposition at 4.

⁸ *Digital Broadband Applications Corp.*, Order, 18 FCC Rcd 9455 (Int'l. Bur. 2003).

for which Canada filed Region 2 Plan modifications requesting to add U.S. coverage,”⁹ in fact, the modifications have been notified to the ITU. That is, the Region 2 Plan entries for the 82W and 91.1W slots now comprise CONUS coverage, the same as any of the USA Plan entries.

Telesat also has been awarded the Canadian authorization for the development of a third DBS slot at 72.5° W.L and is currently operating an interim satellite in that position to allow DirecTV to provide DBS services in the United States. A new satellite with similar coverage is scheduled to be placed in that position.

The Bureau granted EchoStar’s Application without ever determining the magnitude of the power levels that would be needed to protect Canadian DBS operations - in effect, granting an application for a satellite that the record in this proceeding shows would interfere with Telesat’s operations.

II. ECHOSTAR’S APPLICATION SHOULD HAVE BEEN DISMISSED FOR FAILURE TO DEMONSTRATE THAT ITS PROPOSED SYSTEM COULD OPERATE SATISFACTORILY WITH EXISTING DBS SYSTEMS.

EchoStar’s Application, by its terms, does not comport with the Region 2 BSS Plan which authorizes DBS satellites at nine degree separation.¹⁰ Accordingly, the Commission’s rules required EchoStar to show in its Application that its “proposed system could operate satisfactorily if all assignments in the BSS and feeder link Plans were implemented.”¹¹ EchoStar was further required “to demonstrate that its proposed system will meet its performance objectives given the Region 2 assignments.”¹²

⁹ *EchoStar Order* at ¶4

¹⁰ *EchoStar Order* at ¶2.

¹¹ 47 C.F.R. § 25.114(d)(13)(i).

¹² *Amendment of the Commission’s Policies and Rules for Processing Applications in the Direct Broadcasting Satellite Service*, Notice of Proposed Rulemaking, IB Docket No. 06-160, 21 FCC Rcd. 9443, 9458 (2006) (“*Current DBS NPRM*”).

These showing requirements are acknowledged by the Bureau in the *EchoStar Order*,¹³ which further acknowledges that, “[i]n considering the EchoStar Application, [the Bureau] must evaluate the proposed satellite’s interference potential to other authorized DBS satellites and to radiocommunications systems of other countries.”¹⁴ Then, inexplicably having set forth these requirements and ignoring the Bureau’s own responsibility to consider the interference potential of the proposed system on DBS systems in other countries, the Bureau granted EchoStar’s Application.

Far from demonstrating that EchoStar’s proposed system could operate satisfactorily within the constraints of the BSS Region 2 Plan, EchoStar showed just the opposite. When prodded by the Bureau to address the failure of its Application to make this and other requisite technical showings,¹⁵ EchoStar conceded that its proposed system would exceed ITU thresholds for signal degradation to other Region 2 systems, including Telesat’s satellites.¹⁶ The Bureau makes the same finding in the *EchoStar Order*,¹⁷ and (as discussed above) cites with approval Telesat’s analysis that in order to avoid interference to existing services substantial reductions in the power levels of EchoStar’s proposed satellite would be required.¹⁸ However, the significance of Telesat’s analysis, or even any measured consideration of it, appears to be ignored by the Bureau, for it immediately follows a discussion of that analysis with a grant of EchoStar’s Application.¹⁹ The Bureau never found, as it must, that EchoStar’s Application met the standard

¹³ *EchoStar Order* at ¶ 9.

¹⁴ *Id.* at ¶ 15.

¹⁵ See Letter from Thomas S. Tycz, Chief, Satellite Division, International Bureau, to David Moskowitz, Senior Vice President and General Counsel of EchoStar, (Feb. 12, 2004).

¹⁶ See EchoStar Application, Appendix 2 to Supplemental Technical Annex (Feb. 27, 2004), at A2-2.

¹⁷ *EchoStar Order* at ¶ 16.

¹⁸ *Id.*

¹⁹ *Id.* at ¶ 17

for grant set forth in the Commission's rules or could be operated without causing harmful interference to DBS services provided on Telesat's satellites.

Far from disputing this claim, EchoStar itself states in its Comments filed in the Commission's current "tweener" rulemaking proceeding:

"EchoStar is concerned that the International Bureau's recent decision to proceed with granting two tweener applications, including one to EchoStar, did not sufficiently address these fundamental [interference] issues."²⁰

The Bureau never considered whether EchoStar could reduce power sufficiently to avoid interference to Telesat's satellite without sacrificing its performance objectives. In essence, the Bureau's grant appears to be based upon the hypothetical operation of EchoStar's satellite at unstated power reductions and without any submission by EchoStar in its Application as to how its satellite would – or could - operate under such conditions. The Commission's rules require that a satellite application be based on a "concrete proposal," not hypothetical operation.²¹ The Bureau, having no concrete proposal before it that satisfied the Commission's interference requirements, was required under the Commission's rules to dismiss EchoStar's Application for failure to be "substantially complete" when filed.²²

Whether EchoStar actually would construct and launch a satellite given these shortcomings is open to speculation. Indeed, the very lack of specificity in EchoStar's

²⁰ Comments of EchoStar on *Current DBS NPRM* at 3 (citations omitted) (Dec. 12, 2006). To the extent that it may be required under the Commission's pleading rules, Telesat requests leave to call to the Commission's attention comments of EchoStar and other parties in the *Current DBS NPRM*. In any event, EchoStar should not be heard to complain about citations to its own harsh criticism of the Bureau's decision.

²¹ 47 C.F.R. § 25.114(b).

²² *Amendment of the Commission's Space Station Licensing Rules and Policies*, First Report and Order and Further Notice of Proposed Rulemaking, 18 FCC Rcd 10760, 10852 (2003). As EchoStar has been told before, "[i]t is not the agency's task to select for an applicant the type of operation that will minimize impermissible interference." *EchoStar Satellite LLC*, Order in Reconsideration, 19 FCC Rcd 24953, 24957-58 (IB 2004) ("*EchoStar Dismissal Order*"); quoting *Salzar v. FCC*, 778 F.2d 869, 877 (D.C. Cir. 1985).

Application as to how it could operate without interfering with Telesat's services adds to the speculative risk of its proposal and is an essential reason why the Commission strictly enforces its requirement that applications be substantially complete when filed.²³ Such a speculative proposal, once granted, even if never implemented, creates a cloud on the services offered on Telesat's satellite and a threat of interference both to existing customer service and future innovation that should not be allowed to be maintained.²⁴

III. FCC-IMPOSED CONDITIONS OF COORDINATION AND COMPLIANCE WITH ITU THRESHOLDS ARE NO SUBSTITUTE FOR AN EVALUATION OF WHETHER ECHOSTAR WILL INTERFERE WITH EXISTING CANADIAN SERVICES.

Rather than determining whether EchoStar's proposed system could be operated satisfactorily without causing harmful interference to existing DBS systems operating in accordance with the ITU BSS Plan, the Bureau merely conditioned its grant upon EchoStar's coordinating with affected systems and operating below ITU interference thresholds.²⁵ Yet, such FCC-imposed conditions are no substitute for the interference showing required by the Commission's rules nor are they sufficient to protect adjacent systems from harmful interference. In EchoStar's own words, these conditions, while necessary, "are grossly inadequate as a stand-alone solution."²⁶

²³ See, e.g., *EchoStar Dismissal Order* at 24956-57. EchoStar's Application also is incomplete because EchoStar failed to submit the orbital debris mitigation plan required under the Commission's rules. For that reason as well, EchoStar's Application should have been dismissed. EchoStar's assertion that it is unable to provide an orbital debris mitigation plan because its satellite "is still in the design process," *EchoStar Order* at ¶ 21, is no answer. The Commission's strict enforcement of its substantial completion policy is designed to prevent an applicant going forward before it has concrete plans for the construction of its satellite. Yet, here too, the Bureau ignored such policy and instead allowed EchoStar an unprecedented two years to develop an orbital debris mitigation plan to submit as a modification to its authorization. *Id.*

²⁴ The dangers of such uncertainty caused by speculative tweener applications are also explained by EchoStar in its Comments on the *Current DBS NPRM*, at 7.

²⁵ *EchoStar Order* at ¶ 17.

²⁶ Comments of EchoStar on *Current DBS NPRM*, at 4.

A. Operations Should Not Be Permitted without a Showing of Prior Coordination with Canada.

In the *Current DBS NPRM*, the Commission stated that, in the absence of specific technical rules governing tweener operations, in order for the Commission to consider a tweener application, an applicant would be required to “secure agreement with other operators already having assignments in the Region 2 Plans or with prior requests for Plan modifications.”²⁷ That requirement was ignored by the Bureau in this case. No such agreement has been secured and, in the absence of such an agreement, EchoStar’s Application should not have been granted.

Under Commission policy, whenever a DBS applicant submits a technical proposal that would exceed ITU threshold technical limits, the Commission has “stress[ed] that the burden shall be on the applicant to show that the agreement of the affected Administration(s) can be obtained.”²⁸ In the absence of an actual agreement with potentially affected administrations, an applicant is required to demonstrate that such an agreement can be obtained, for example, by “extensive technical analyses demonstrating that the impact on the services of affected Administrations is negligible.”²⁹

Far from making this showing, EchoStar did little more than to express its optimism that coordination agreements could be obtained and even then EchoStar expressed little hope that coordination could be possible if triple-feed antennas were to be used.³⁰ Yet, as pointed out by Telesat in its Reply, that is exactly the implication of the Canada Plan’s three entries of 91°, 82°.

²⁷ *Current DBS NPRM* at 9458.

²⁸ *Policies and Rules for the Direct Broadcast Satellite Service*, Report and Order, 17 FCC Rcd 11331, 11381 (2002).

²⁹ *Id.*; see also Letter from Fern J. Jarmulnek, Deputy Chief, Satellite Division, to Todd M. Stansbury, Counsel for Spectrum Five, DA 05-354, at 4 (Feb. 17, 2005) (“Letter to Spectrum 5”).

³⁰ See Consolidated Reply to Oppositions and Comments of EchoStar, File No. SAT-LOA-20030609-00013, at 3-4 (“EchoStar Reply”) (Jun. 1, 2005).

and 72.5° W.L..³¹ Thus, the interference threat of EchoStar's proposed system into the current Canadian dual feed antenna environment and future triple feed antenna environment is enormous.

Against this backdrop, EchoStar's simple assertion of confidence that it will be able to coordinate its proposed systems is insufficient and fails by the same logic that EchoStar used to attack the tweener applications of Spectrum Five: "It simply is insufficient to assert, based upon preliminary results, that coordination will be 'readily achievable.'"³²

Even if the Commission does not on review deny EchoStar Application, based on the fact that coordination has not been completed, at a minimum it should clarify that EchoStar will not be granted authority to operate its proposed tweener satellite prior to obtaining the agreement of affected administrations, particularly Canada. EchoStar itself seems to have invited such a condition in its Reply to Telesat's interference showings.³³ Moreover, in the text of the *EchoStar Order*, the Commission indicates that such a prior coordination condition will be required.³⁴ Yet, the ordering clauses of the *EchoStar Order* suggest that EchoStar could proceed without coordination under some form of non-interference condition.³⁵ At the very least, and particularly given the potential controversy with other administrations and the real risk of harmful interference, the Commission should clarify that no EchoStar operation be permitted absent successful coordination with the Canadian Administration.

³¹ See Telesat Reply at 3-4.

³² Opposition to Petition for Declaratory Ruling of EchoStar, File Nos. SAT-LOI-20050312-00063, at n.1 (May 16, 2005).

³³ See EchoStar Reply at 2

³⁴ See *EchoStar Order* at ¶ 16.

³⁵ *Id.* at ¶ 28 (condition b).

B. EchoStar Itself Maintains that Compliance with ITU Interference Thresholds Is Not Sufficient To Prevent Tweeners From Causing Harmful Interference to DBS Systems.

Not only has EchoStar failed to demonstrate compliance with ITU interference thresholds, it has failed to demonstrate, and elsewhere is on record with the Commission vigorously disputing, that compliance with such thresholds is sufficient to protect 4.5° spaced DBS satellites from interference from tweener satellites. Most recently, in the Commission's current rulemaking proceeding evaluating the feasibility of tweener spacing for DBS satellites, EchoStar itself presented an extensive showing proving that compliance with ITU threshold standards is insufficient to prevent interference to existing services.³⁶ EchoStar further emphasizes that allowing tweeners on this basis would halt technological innovation that is essential to maintaining DBS as a competitive force in the multichannel video market.³⁷

Still trying to preserve its authorization in this proceeding, all the while challenging every underpinning of the *EchoStar Order*, EchoStar also asserted in its Comments that "harmful interference is not likely to be as great if the Tweener slot is located between satellites that are focused on serving a different geographic location, such as Canada."³⁸ Yet, EchoStar's assertion ignores both the proximity of Canadian customers to the U.S border, being in some cases to the south of that border, and the fact that Telesat's satellites are authorized by the Commission and notified to the ITU for a CONUS coverage service area.

³⁶ See Comments of EchoStar on *Current DBS NPRM* at 10 and Technical Annex to Comments of EchoStar.

³⁷ *Id.* at 11. DIRECTV's Comments on the *Current DBS NPRM* proceeding contain further evidence of the interference potential of tweener satellite to existing DBS and include an extensive study of typical pointing errors in subscriber antennas and the massive percentage of subscribers predicted to lose service due to interference from tweener satellites as a result. See Comments of DIRECTV at 13-16 (Dec. 12, 2006).

³⁸ Comments of EchoStar on *Current DBS NPRM* at 11, n.18.

IV. TELESAT'S SATELLITES ARE ENTITLED TO THE SAME LEVEL OF PROTECTION AS ACCORDED U.S. LICENSED SATELLITES.

As set forth by Telesat in its Reply Comments in this proceeding, EchoStar did not apply the same standard to the interference threat posed by tweener satellites to Canadian satellites as it did when confronting potential interference posed by tweeners to U.S. DBS satellites.³⁹ Thus, EchoStar withdrew tweener applications because of potential interference to U.S. DBS satellites 4.5 degrees away and has urged that the tweener application of Spectrum Five be dismissed, among other reasons, for its failure to show that it "could operate satisfactorily if all U.S. assignments in the BSS and feeder link plans were implemented."⁴⁰ But EchoStar's continued prosecution of its Application in the instant proceeding reflects a lack of concern regarding the same interference potential posed by its proposed satellite to Telesat's satellites, also only 4.5 degrees away.

Rather than address this obvious inconsistency, the Bureau seems itself to adopt EchoStar's inconsistency on this issue. Thus, while the Bureau found that it had "sufficient evidence to determine that EchoStar 86.5° W. will not cause unacceptable interference to other U.S. DBS systems,"⁴¹ the *EchoStar Order* is silent as to evidence to determine whether such interference would be suffered by existing Canadian DBS services. This lack of concern with interference to Canadian satellite systems is not permitted under the Commission's rules, is inconsistent with WTO principles, and undermines the close cooperation between the United

³⁹ Telesat Reply at 3-4.

⁴⁰ *Id.* at 4, quoting Opposition to Petition for Declaratory Ruling of EchoStar, File Nos. SAT-LOI-22050312-00062/63, May 16, 2005.

⁴¹ *EchoStar Order* at ¶ 16.

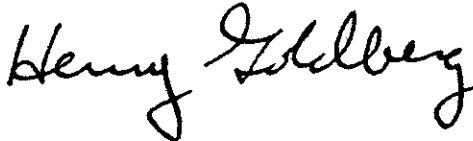
States and Canada that is necessary to ensure that operations on each side of the border do not interfere with each other.⁴²

V. CONCLUSION

It was incumbent upon the Bureau above all in this proceeding to determine whether EchoStar's proposed satellite would interfere with DBS satellites operating at 4.5 degrees separation from the proposed satellite slot and whether the proposed satellite could operate satisfactorily if all assignments in the BSS Plan, not just U.S. assignments, were implemented. The Bureau failed in this responsibility and its decision cannot be allowed to stand. Accordingly, Telesat respectfully requests the Commission reverse the Bureau's *Order* and dismiss EchoStar's Application.

Respectfully submitted,

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⁴² Here, moreover, as discussed above, Telesat's satellites also are authorized to provide service in the U.S. so the failure to apply the same standard of interference analysis to its system as applied to U.S. licensed DBS systems is all the more glaring.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Application for Review was sent by first-class mail, postage prepaid, this 29th day of December, 2006, to the following:

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