

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

)	
In the Matter of)	
)	
Telesat Canada)	
)	
Petition for Declaratory Ruling)	
For Inclusion of ANIK F1 on the)	
Permitted Space Station List)	
)	File No. SAT-PDR-20000420-00083
New Skies Satellites N.V.)	
Petition for Clarification or, in the)	
Alternative, for Reconsideration)	
)	

ORDER

Adopted: September 13, 2001

Released: September 14, 2001

By the Chief, International Bureau:

I. INTRODUCTION

1. In this Order, we address New Skies Satellites N.V.'s (New Skies') petition for clarification of the *ANIK F1 Permitted List Order*.¹ Specifically, we confirm that placing a satellite on the Permitted Space Station List (Permitted List) authorizes only routinely licensed earth stations to communicate with that satellite, and that routine earth station standards apply to receive-only earth stations. We emphasize, however, that ANIK F1 is not permitted to provide direct-to-home fixed-satellite service to users in the United States. Furthermore, receive-only earth stations -- whether routine or non-routine -- may not receive transmissions from ANIK F1 without prior Commission authorization to do so. We also explain in more detail our conclusion that ANIK F1's downlink operations will not cause harmful interference to other satellite systems as close as two degrees away. By these actions, we clarify the extent to which ANIK F1 may provide service to the U.S. market.

II. BACKGROUND

2. In the *DISCO II Order*, the Commission adopted rules implementing the U.S. commitments under the World Trade Organization (WTO) Basic Telecommunications Agreement (WTO Telecom

¹ Telesat Canada, Petition for Declaratory Ruling For Inclusion of ANIK F1 on the Permitted Space Station List, *Order*, 15 FCC Rcd 24828 (Sat. and Rad. Div., Int'l Bur., 2000) (*ANIK F1 Permitted List Order*).

Agreement).² In *DISCO II*, the Commission implemented U.S. WTO commitments by taking several actions, including adopting a procedure by which non-U.S.-licensed satellite operators can obtain access to the U.S. market.³ Under this procedure, we do not license non-U.S. satellites, but rather allow U.S. earth station operators to apply for earth station licenses, or to modify their existing licenses to authorize communications with a particular non-U.S. satellite.⁴

3. In the *DISCO II First Reconsideration Order*, the Commission streamlined the process by which non-U.S.-licensed satellite operators can obtain access to the U.S. market.⁵ Under this streamlined process, once we have completed the analysis established in the *DISCO II Order* for a particular non-U.S.-licensed space station and a particular satellite service, and determined that it can be permitted to access the U.S. market, the satellite is placed on the Permitted List for the services reviewed upon the applicant's request.⁶ This list identifies all satellites and services with which U.S.-licensed earth stations with routinely authorized technical parameters are permitted to communicate without additional Commission action, provided that those communications fall within the same technical parameters and conditions established in the earth stations' original licenses.⁷

4. On December 19, 2000, the Satellite and Radiocommunication Division (Division) released the *ANIK F1 Permitted List Order* granting Telesat Canada's (Telesat's) request to add ANIK F1, a Canadian-licensed satellite operated at 107.3° W.L., to the Permitted List for the provision of fixed-satellite service, excluding Direct-to-Home services in the United States. By doing so, the Division granted authority to all ALSAT-designated earth stations⁸ to communicate with ANIK F1 at 107.3° W.L., for purposes of

² For a brief summary of the WTO Telecom Agreement, see Amendment of the Commission's Regulatory Policies to Allow Non-U.S.-Licensed Space Stations to Provide Domestic and International Satellite Service in the United States, First Order on Reconsideration, IB Docket No. 96-111, 15 FCC Rcd 7207, 7208-09 (para. 3) (1999) (*DISCO II First Reconsideration Order*).

³ *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7207 (para. 1).

⁴ Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Satellites Providing Domestic and International Service in the United States, *Report and Order*, IB Docket No. 96-111, 12 FCC Rcd 24094, 24175-76 (paras. 191-92) (1997) (*DISCO II* or *DISCO II Order*).

⁵ *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7207 (para. 1).

⁶ *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7214 (para. 16).

⁷ *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7214-16 (paras. 16-20).

⁸ Originally, "ALSAT" was an abbreviation for "all U.S.-licensed satellites." Under an ALSAT earth station license, an earth station operator providing fixed-satellite service in the conventional C- and Ku-bands could access any U.S.-licensed satellite without additional Commission action, provided that those communications fall within the same technical parameters and conditions established in the earth station license. See *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7210-11 (para. 6). The *DISCO II First Reconsideration Order* expanded ALSAT earth station licenses to permit ALSAT-designated earth stations to access any satellite on the Permitted Space Station List. *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7215-16 (para. 19).

providing Fixed-Satellite Services other than Direct-to-Home (DTH) service, Direct Broadcast Satellite (DBS) service, and Digital Audio Radio Service (DARS).⁹

5. In adding ANIK F1 to the Permitted List, the Division rejected New Skies' contention that ANIK F1 does not comply with the Commission's technical rules that implement two-degree orbital spacing between satellites. New Skies noted that ANIK F1's peak equivalent isotropically radiated power (EIRP) is 46.3 dBW, which is higher than the powers on other satellites currently operating in that portion of the geostationary satellite orbit arc.¹⁰ New Skies maintained that ANIK F1's EIRP is excessive, and therefore, the satellite is not two-degree-compliant.¹¹ New Skies was also concerned that it will be difficult to coordinate ANIK F1 with a New Skies satellite it plans to operate at 105° W.L.¹² The Division concluded that Telesat's downlink power level should not cause harmful interference into any other two-degree-compliant satellite system located as close as two degrees away from ANIK F1 because placing ANIK F1 on the Permitted List authorizes Telesat to transmit only to routine earth stations in the United States.¹³ Because, by definition, a "routine" earth station complies with all of the Commission's technical rules applicable to earth stations, and thus, can operate in a two-degree spacing environment, the Division concluded that transmissions between ANIK F1 and U.S. earth stations would be two-degree compliant.

6. On January 17, 2001, New Skies requested us to clarify several issues addressed in the *ANIK F1 Permitted List Order*.¹⁴ These include whether placing a satellite on the Permitted List enables only "routine" earth stations to communicate with that satellite, and whether a receive-only earth station operating in the C-band must have an antenna of at least 4.5 meters in diameter to be considered "routine." New Skies also asserts that the Division did not fully explain why it concluded that the downlink power Telesat plans to use will not cause harmful interference to earth stations with antennas of at least 4.5

⁹ ALSAT earth stations are prohibited from communicating with ANIK F1 for the provision of DTH, DBS, and DARS because the United States did not make market access commitments for these services under the WTO agreement, and took a most favored nation exemption for these services as well. *See ANIK F1 Permitted List Order*, 15 FCC Rcd at 24830-31 (para. 7), and sources cited therein.

¹⁰ New Skies stated that ANIK E2's EIRP at 107.3° W.L. is 38 dBW, and the EIRP for GE Americom's satellites at 101° W.L. and 103° W.L. is 41 dBW. *See ANIK F1 Permitted List Order*, 15 FCC Rcd at 24832 (para. 11). Subsequent to the *ANIK F1 Permitted List Order*, Telesat relocated ANIK E2 from 107.3° W.L. to 111.1° W.L.

¹¹ *See ANIK F1 Permitted List Order*, 15 FCC Rcd at 24832 (para 11).

¹² *ANIK F1 Permitted List Order*, 15 FCC Rcd at 24832 (para 11). In response to this argument, we determined that it is not necessary to complete international coordination before a satellite system can be authorized to provide service in the United States. We expected Telesat and New Skies to cooperate to resolve these outstanding coordination issues. *ANIK F1 Permitted List Order*, 15 FCC Rcd at 24834 (para. 14). In other words, we did not view this proceeding as the proper forum for trying to facilitate coordination discussions between two non-U.S. satellite operators.

¹³ *ANIK F1 Permitted List Order*, 15 FCC Rcd at 24834 (para 15).

¹⁴ New Skies Satellites N.V., Request for Clarification or, in the Alternative, for Reconsideration, File No. SAT-PDR-20000420-00083, filed Jan. 17, 2001 (*New Skies Petition*).

meters in diameter. Telesat filed an opposition to New Skies' petition.¹⁵ We clarify the *ANIK F1 Permitted List Order* as set forth below.

III. DISCUSSION

7. New Skies states that it understands that in adding ANIK F1 to the Permitted List, the Division concluded that ANIK F1's EIRP levels will not cause harmful interference to adjacent satellite systems if both ANIK F1 and the adjacent satellite systems are operating with routinely licensed earth stations.¹⁶ New Skies requests the Division to "confirm" this.¹⁷ New Skies's understanding is correct. By placing a satellite on the Permitted List, we authorize only ALSAT-designated earth stations to communicate with that satellite, and only routine earth stations are eligible for ALSAT earth station licenses.¹⁸ We emphasized this in the *ANIK F1 Permitted List Order*.¹⁹ We also emphasized that if a non-routine earth station seeks to communicate with ANIK F1, the earth station licensee must file a license modification application to request authorization to add ANIK F1 as an authorized point of communication.²⁰ Further, all operations between non-routine earth stations and ANIK F1 would have to be coordinated with all other potentially affected satellite systems.²¹

8. Telesat, however, argues that the routine earth station licensing standards do not apply to receive-only earth stations.²² We disagree. "Routinely licensed" earth stations are all earth stations that meet the Commission's Part 25 technical requirements designed to implement two-degree orbital spacing. Further, operations of "routine" earth stations are protected against interference that may be caused by other satellite systems.²³ Under Section 25.209(c) of the Commission's rules, licensed receive-only earth stations are protected from interference to the degree to which the earth station receiving antenna meets the antenna gain envelopes in Sections 25.209(a) and (b).²⁴ Generally, earth station antennas must be a

¹⁵ Telesat Canada, Opposition to New Skies Satellites, N.V.'s Request for Clarification or, in the Alternative, for Reconsideration, File No. SAT-PDR-20000420-00083, filed Jan. 29, 2001 (*Telesat Opposition*).

¹⁶ *New Skies Petition* at 5.

¹⁷ *New Skies Petition* at 5-6.

¹⁸ *See DISCO II First Reconsideration Order*, 15 FCC Rcd at 7214-15 (para. 17).

¹⁹ *ANIK F1 Permitted List Order*, 15 FCC Rcd at 24834 (para. 15).

²⁰ *Id.*

²¹ *ANIK F1 Permitted List Order*, 15 FCC Rcd at 24834 n.45.

²² *Telesat Opposition* at 2-3.

²³ *See* 47 C.F.R. § 25.209(e).

²⁴ 47 C.F.R. § 25.209(c). *See also* *Deregulation of Domestic Receive-Only Satellite Earth Stations, Second Report and Order*, CC Docket No. 78-374, 104 FCC 2d 348, 351-52 (paras. 7-8) (1986) (allowing receive-only earth station operators to use smaller-than-routine antennas, but requiring them to accept interference if they

minimum size (4.5 meters in the C-band and 1.2 meters at Ku-band) to meet these envelopes.²⁵ Consequently, we routinely process applications for Part 25 compliant receive-only earth stations that meet the size guidelines and afford these earth stations interference protection. In contrast, we process applications on a case-by-case --or non-routine -- basis if the proposed receive-only earth station is smaller than “routine” to determine whether the earth stations can operate interference-free in a two-degree spacing environment.²⁶ In these cases, we may include license conditions reminding the licensee, and often requiring the licensee to alert its customers, that the operations are not protected against harmful interference caused by two-degree compliant satellite systems.²⁷

9. We emphasize, however, that ANIK F1 is not permitted to provide direct-to-home fixed-satellite service to users in the United States. This is because ANIK F1 is not permitted to provide these services to the U.S. market and its inclusion on the Permitted List is so conditioned. Furthermore, receive-only earth stations -- whether routine or non-routine -- may not receive transmissions from ANIK F1 without prior Commission authorization to do so.²⁸

10. Telesat also claims that receive-only earth stations receiving transmissions from non-U.S.-licensed satellites on the Permitted List should be licensed.²⁹ Currently, receive-only earth stations receiving transmissions from any non-U.S.-licensed satellite, regardless of whether the satellite is on the Permitted List, must be licensed.³⁰ In the context of the Commission's upcoming *Part 25 Streamlining* proceeding, several parties proposed revising this receive-only earth station licensing requirement.³¹

do so).

²⁵ See *Part 25 Streamlining NPRM*, 15 FCC Rcd at 25133 (para. 11).

²⁶ See 47 C.F.R. § 25.209(f).

²⁷ See, e.g., Televisa International, LLC., Application for Blanket License for Receive-Only Earth Stations in the Fixed Satellite Service for Direct-to-Home Subscription Television Service, *Order and Authorization*, 13 FCC Rcd 10074, 10078 (para. 12) (Int'l Bur. 1997) (*Televisa Order*) (where the Bureau granted Televisa a blanket receive-only earth station license to allow it to serve DTH customers from a Mexican satellite, but did not grant protection from interference because the proposed antennas were too small to meet the routine earth station requirements).

²⁸ See 47 C.F.R. § 25.131(j).

²⁹ Telesat Opposition at 3.

³⁰ See 47 C.F.R. § 25.131(j); *DISCO II Order*, 12 FCC Rcd at 24179-80 (paras. 201-03).

³¹ See 2000 Biennial Regulatory Review -- Streamlining and Other Revisions of Part 25 of the Commission's Rules Governing the Licensing of, and Spectrum Usage by, Satellite Network Earth Stations and Space Stations, *Notice of Proposed Rulemaking*, IB Docket No. 00-248, 15 FCC Rcd 25128 (2000) (*Part 25 Streamlining NPRM*), and the New Skies and Telesat Canada (Telesat) pleadings filed in response to the *Part 25 Streamlining NPRM*. Home Box Office (HBO) filed a petition for declaratory ruling on January 4, 2000, raising a receive-only earth station issue similar to one that Telesat raises in its opposition to New Skies' petition. No comments or replies were filed in response to this petition. The Commission will also address HBO's petition in the *Part 25 Streamlining* proceeding.

Accordingly, the Commission will revisit the issue of whether receive-only earth stations receiving transmissions from non-U.S.-licensed satellites on the Permitted List should be licensed in the *Part 25 Streamlining* proceeding.

11. Finally, New Skies also seeks a more detailed explanation for the Division's conclusion that ANIK F1 downlink transmissions will not cause harmful interference into satellite systems as close as two degrees away.³² In its petition, Telesat provided all the technical information specified in Section 25.114 of the Commission's rules, which is the same technical information we require applicants requesting U.S. satellite licenses to provide.³³ Based on that information, the Division was able to determine that, with one exception, ANIK F1 meets all the relevant satellite-related technical requirements in Section 25.210.³⁴ In addition, Telesat showed that the power flux density (PFD) at the earth's surface produced by emissions from ANIK F1 in the C-band is within the limits specified in Section 25.208(a).³⁵ Accordingly, we concluded that allowing ALSAT earth stations to communicate with ANIK F1 should not cause harmful interference into any other two-degree-compliant satellite system located as close as two degrees away from ANIK F1.³⁶

IV. ORDERING CLAUSES

12. Accordingly, pursuant to Section 0.261(a)(15) of the Commission's rules, 47 C.F.R. § 0.261(a)(15), we clarify the *ANIK F1 Permitted List Order*, 15 FCC Rcd 24828 (Sat. and Rad. Div., Int'l

³² *New Skies Petition* at 6.

³³ In particular, Telesat provided the information specified in Sections 25.114(c)(5) through (11) and (14). *See* Telesat Petition for Declaratory Ruling, File No. SAT-PDR-20000420-00083, filed Apr. 20, 2000, at Exh. I (*Telesat Permitted List Petition*). Telesat was not required to provide financial information because its satellite had been launched at the time we adopted the *ANIK F1 Permitted List Order*. *ANIK F1 Permitted List Order*, 15 FCC Rcd at 24831 (para. 10).

³⁴ 47 C.F.R. § 25.210. The one exception is that ANIK F1 is not capable of switching polarity from the ground, as required by Section 25.210(a)(3) of the Commission's rules, 47 C.F.R. § 25.210(a)(3). The Division addressed this issue by including two conditions on the Permitted List. *ANIK F1 Permitted List Order*, 15 FCC Rcd at 24835 (para. 17).

³⁵ *Telesat Permitted List Petition* at Exh. I, Table 16; 47 C.F.R. § 25.208(a). Section 25.208(a) states that: "In the band 3700-4200 MHz, the power flux density at the Earth's surface produced by emissions from a space station for all conditions and for all methods of modulation shall not exceed the following values:

-152 dB(W/m²) in any 4 kHz band for angles of arrival between 0 and 5 degrees above the horizontal plane;
-152 + (δ -5)/2 dB(W/m²) in any 4 kHz band for angles of arrival δ (in degrees) between 5 and 25 degrees above the horizontal plane; and
-142 dB(W/m²) in any 4 kHz band for angles of arrival between 25 and 90 degrees above the horizontal plane."

³⁶ *ANIK F1 Permitted List Order*, 15 FCC Rcd at 24834 (para. 15).

Bur., 2000), as set forth above.

13. This Order is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release.

FEDERAL COMMUNICATIONS COMMISSION

Donald Abelson
Chief, International Bureau