Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
EchoStar Satellite LLC	)	
	)	File Nos. SAT-LOA-20030827-00180
Applications for Authority to Construct,	)	SAT-LOA-20030827-00182
Launch and Operate Geostationary Satellites	)	SAT-LOA-20030827-00185
In the Fixed-Satellite Service using the Ka	)	SAT-LOA-20030827-00187
and/or Extended Ku-Bands at the 83° W.L.,	)	
105° W.L., 113° W.L., and 121° W.L. Orbital Locations	)	Call Signs: S2493; S2495; S2498; S2500

MEMORANDUM OPINION AND ORDER

Adopted: April 28, 2004 **Released: April 29, 2004**

By the Chief, Satellite Division, International Bureau:

I. INTRODUCTION

1. By this Order we deny the above referenced applications filed by EchoStar Satellite LLC (EchoStar) requesting authority to launch and operate four geostationary orbit satellites (GSO) in the Fixed-Satellite Service (FSS) using the Ka-band frequencies for non-geostationary satellite (NGSO) FSS use.[1] We deny the applications because EchoStar has not demonstrated that its proposed satellites will not cause interference to other systems in those frequency bands, nor that a waiver of our rules is justified. In addition we deny those portions of the applications requesting downlink (space-to-Earth) frequencies in the extended Ku-band.[2] The Ku-band frequencies requested by EchoStar for its proposed downlink operations are allocated for international services only, and EchoStar failed to request a waiver to use these frequencies for domestic service. As a result of these actions, the remaining portions of EchoStar's applications are limited to uplink operations in the extended Ku-band. Because EchoStar cannot operate a viable system with uplink operations only, we dismiss the remaining portion of its applications as incomplete.

II. BACKGROUND

2. In August 2003, EchoStar filed four applications to operate Ka-band GSO satellites, proposing to provide: Direct-to-Home services to supplement services now provided by EchoStar's direct-broadcasting satellite (DBS) system; two-way broadband services; transport of programming to

[1] The term "Ka-Band" generally refers to the space-to-Earth (downlink) frequencies at 17.7-20.2 GHz and the corresponding Earth-to-space (uplink) frequencies at 27.5-30.0 GHz.

[2] EchoStar proposes operations in the extended Ku-band, using the 10.95-11.2 GHz and 11.45-11.7 GHz (space-to-Earth) and 13.75-14.00 GHz (Earth-to-space) frequency bands.

EchoStar's uplink centers; and International Direct-to-Home services.[3] In two of its applications, EchoStar seeks to operate GSO satellites at the 83° W.L. and 121° W.L. orbital locations in the portion of the Ka-band designated either for primary or exclusive NGSO FSS use.[4] In its two other applications, EchoStar seeks to operate hybrid satellites at the 105° W.L. and 113° W.L. orbital locations using these same NGSO FSS Ka-band frequencies as well as certain extended Ku-band frequencies.[5] In all four applications, EchoStar requests waivers of Section 2.106 of the Commission's Rules, and in particular footnote NG 165, to permit its operation of GSO satellites in a band that domestically is limited to NGSO FSS use only.

3. Concurrent with filing the applications, EchoStar filed a Petition for Rulemaking, proposing changes to the Ka-band band plan to allow co-primary GSO FSS operations in spectrum designated as NGSO FSS primary spectrum.[6] EchoStar states that its applications, however, are not predicated on any rule changes and that the applications may be granted without waiting for the adoption of new rules.[7]

4. Three entities filed petitions or comments in response to EchoStar's applications, Northrop Grumman Space Technology and Mission Systems Corporation (Northrop Grumman), Hughes Electronics Corporation and Hughes Network Systems, Inc. (collectively Hughes) and New Skies Satellites N.V.[8] Northrop Grumman asserts EchoStar's applications should be denied because they fail to comply with the Commission's rules, and because EchoStar failed to justify its waiver request. Northrop Grumman states that the Commission's rules specifically establish separate bands where GSO and NGSO satellites can each operate on a primary basis. According to Northrop Grumman, whether the

[3] A fifth application, file number SAT-LOA-20030827-00176, was subsequently withdrawn. *See* Public Notice, Satellite Policy Branch Information, Report No. SAT-00166 (September 24, 2003). The applications were originally filed by EchoStar Satellite Corporation. On December 31, 2003, EchoStar notified the Commission of its name change to EchoStar Satellite LLC. Letter to Marlene H. Dortch, Secretary, FCC from Pantelis Michalopoulos, Counsel for EchoStar Satellite LLC (dated Dec. 31, 2003).

[4] The 28.6-29.1 GHz uplink band is designated for NGSO FSS primary use. Stations operating in primary services are protected against interference from stations of secondary services. Stations operating in the secondary service cannot cause harmful interference to or claim protection from harmful interference from stations of a primary service. Co-Primary services have equal rights to operate in particular frequencies. *See* 47 C.F.R. § 2.104(d) and 2.105(c); Rulemaking to Amend Parts 1, 2, 21 and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, *Order,* 12 FCC Rcd 22310, 22325 (1997). The 18.8-19.3 GHz downlink band is limited to use by NGSO FSS satellite systems only. *See* 47 C.F.R. § 2.106, footnote NG 165.

[5] EchoStar Satellite LLC, Applications for Authority to Construct, Launch and Operate Nine Geostationary Satellites in the Fixed-Satellite Service Using the Ka-and/or extended Ku-Bands at the 81°, 83°, 101°, 105°, 109°, 113°, 119°, 121° and 123° W.L. orbital Locations, file numbers SAT-LOA-20030827-00180 (to operate a GSO satellite using Ka-band frequencies at 121° W); SAT-LOA-20030827-00182 (to operate a GSO satellite using Ka-Band frequencies at 83° W.L.); SAT-LOA-20030827-00185 (to operate a hybrid GSO satellite using Ka- and extended Ku-Band frequencies at 105° W.L.); SAT-LOA-20030827-00185 (to operate a hybrid GSO satellite using Ka-and extended Ku-band frequencies at 113° W.L.) (*EchoStar Applications*).

[6] EchoStar Satellite LLC, Petition for Rulemaking to Redesignate the 28.6-29.1 GHz (Earth-to-space) and 18.8-19.3 GHz (space-to-Earth) Bands to allow Geostationary Fixed-Satellite Service Operations on a Co-Primary Basis, RM No. 10767 (filed Aug. 28, 2003). This Petition remains pending.

[7] *EchoStar Applications* at 4.

[8] Northrop Grumman Space Technology and Mission Systems Corporation, Consolidated Petition to Dismiss, filed October 24, 2003 (*Northrop Grumman Petition*); Petition to Deny or Dismiss of Hughes Electronics Corporation and Hughes Network Systems, Inc., filed October 24, 2003 (*Hughes Petition*); and Comments of New Skies Satellites N.V. (*New Skies Comments*).

purpose for establishing the separate bands is no longer justified or outweighed by the public interest, as EchoStar asserts, is a matter that must be addressed in a rulemaking proceeding.[9] Challenging the validity of the current rule, Northrop Grumman states, does not merit a waiver of the rule.

5. Hughes opposes the EchoStar applications on similar grounds. Hughes states that the Commission was explicit in stating there was to be no GSO FSS use of the 18.8-19.3 GHz band unless and until a contrary decision was reached in a rulemaking proceeding. In its comments, Hughes refers to the Commission's 18 GHz Order proceedings, stating the Commission eliminated the possibility of secondary use by GSO FSS in the 18.8-19.3 GHz portion of the band.[10] Hughes also asserts that the Commission's dismissal of similar applications mandates the dismissal of the EchoStar applications.

6. New Skies Satellites N.V. filed comments requesting that any grant of EchoStar's applications be conditioned to show New Skies' International Telecommunication Union (ITU) date priority at the 105° W.L. orbital location. EchoStar filed a consolidated opposition to the petitions and comments.[11]

III. DISCUSSION

A. Ka-band Request

1. Licensing Framework

7. EchoStar's applications were submitted in accordance with the Commission's *Space Station Licensing Reform Order*, which adopted a "first-come, first-served" licensing process for GSO-like satellite systems.[12] EchoStar states that under this process, the Commission will consider applications filed after the ITU adopts an international allocation but before the Commission adopts a domestic allocation.[13] EchoStar states that its applications satisfy this requirement because all of the frequency bands it requests are allocated to FSS on a primary basis, both domestically and internationally.[14] Under the ITU Radio Regulations, the Ka-band frequencies requested allow co-primary operations by GSO and NGSO systems. Domestically, however, use of the 18.8-19.3 GHz band is limited to NGSO FSS satellites and the 28.6-29.1 GHz band is designated for primary NGSO FSS use, with GSO use permitted only on a non-interference basis. EchoStar also requests a waiver of Section 2.106 of the Commission's rules, footnote NG 165, which limits the use of the 18.3-19.3 GHz bands to NGSO FSS use only.[15] EchoStar asserts that its applications should be granted without waiting for the Commission's action on its rulemaking petition because the *Space Station Licensing Reform Order*

[9] *Northrop Grumman Petition* at 6.

[10] *Hughes Petition* at 4-5.

[11] EchoStar Satellite Corporation, Consolidated Opposition to Petitions to Deny or Dismiss and Reply Comments, filed November 6, 2003 (*EchoStar Consolidated Opposition*). Hughes and New Skies filed replies to EchoStar's Consolidated Opposition: Reply of New Skies Satellites N.V., filed Nov. 17, 2003; and Reply of Hughes Electronics Corporation and Hughes Network Systems, Inc. to Consolidated Opposition of EchoStar Satellite Corporation, filed Nov. 19, 2003.

[12] Amendment of the Commission's Space Station Licensing Rules and Policies, *First Report and Order and Further Notice of Proposed Rulemaking in IB Docket No. 02-34, and First Report and Order in IB Docket No. 02-54*, 18 FCC Rcd 10760 (2003) (*Space Station Licensing Reform Order*).

[13] *EchoStar Applications* at 11.

[14] *EchoStar Applications* at 11.

[15] 47 C.F.R. § 2.106, footnote NG 165.

provides that applications may be processed where the Commission has not yet adopted domestic service rules for a particular service in a frequency band in which international allocation is complete.[16]

8. Northrop Grumman and Hughes maintain that EchoStar's reliance on the *Space Station Licensing Reform Order* is misplaced. EchoStar's argument that the Commission will process applications where there is an international allocation but prior to the adoption of domestic service rules is not applicable because there are rules mandating that the 28.6-29.1 GHz and 18.8-19.3 GHz bands are for NGSO FSS systems on a primary basis.[17] Hughes states that the rules are "crystal clear" that absent the development of sharing criteria in a rulemaking, there is to be no sharing between GSO and NGSO systems in the 18.8-19.3 GHz and 28.6-29.1 GHz bands.[18] Both Northrop Grumman and Hughes also note that the Commission has denied the requests of other satellite operators for secondary GSO FSS use in the NGSO FSS portion of the Ka-band and asserts that EchoStar has not distinguished its circumstances from controlling precedent.[19] In denying similar requests from other satellite operators, Hughes states, the Commission is bound by administrative law to treat similarly situated parties alike absent legally sustainable reasons to the contrary.[20]

9. EchoStar responds that the assertion that service rules exist in the requested spectrum is incorrect because there are no service rules for GSO FSS operations in the 18.8-19.3 GHz and 28.6-29.1 GHz bands, only rules for NGSO FSS systems in the band.[21] Moreover, EchoStar states, it is "beside the point" that the current U.S. Table of Allocations reserves the 18.8-19.3 GHz band for NGSO FSS systems because it is requesting a waiver of the domestic allocation and seeks to operate on a non-conforming, non-harmful interference basis as contemplated by the *Space Station Licensing Reform Order*.[22]

10. We find that EchoStar incorrectly relies on the *Space Station Licensing Reform Order's* provision that applications will be considered after the ITU adopts an international allocation but before the Commission adopts a domestic allocation. The Commission adopted this procedure so that service would not be delayed during the time it takes the Commission to implement an international allocation domestically. This is not the case here.

11. The Commission completed allocation of the Ka-band in 1996. At that time, the Commission adopted rules for the Earth-to-space (uplink) FSS allocation at 27.5-30.0 GHz. To allow multiple services to use this band, the Commission segmented it and designated specified portions for terrestrial operations, feeder link operations for mobile-satellite service (MSS) systems, service link operations for GSO FSS systems, and service link operations for NGSO FSS systems.[23] Significantly, the

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[16] *EchoStar Applications* at 11 and 13, citing the *Space Station Licensing Reform Order*. In this Order the Commission discussed the time it takes for the ITU to adopt and international allocation and stated that it would dismiss satellite applications without prejudice as premature if the application is filed before the ITU adopts a necessary international frequency allocation. The Commission noted that it would, however, consider applications filed after the ITU adopts an international frequency allocation but before the Commission adopts a domestic allocation. 18 FCC Rcd at 10809.

[17] *Hughes Petition* at 7.

[18] *Hughes Petition* at 7; *Northrop Grumman Petition* at 2.

[19] *Hughes Petition* at 7; *Northrop Grumman Petition* at 5.

[20] *Hughes Petition* at 7.

[21] *EchoStar Consolidated Opposition* at 6.

[22] *EchoStar Consolidated Opposition* at 7.

[23] Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local (continued....)

Commission adopted discrete designations for NGSO FSS systems and GSO FSS systems, while adopting shared designations for other services. Specifically, the Commission designated 28.35-28.6 GHz and 29.5-30.0 GHz to GSO FSS on a primary basis, and 29.25-29.5 to GSO FSS on a co-primary basis with feeder links for the mobile-satellite service. It also designated 28.6-29.1 GHz to NGSO FSS on a primary basis, with no overlap in bands designated for primary operations for these types of systems.[24] In adopting the band plan, the Commission stated that "[t]he plan … designates co-frequency sharing in band segments where the Commission and the parties have concluded it is technically feasible."[25] Similarly, the Commission later adopted rules involving the space-to-Earth (downlink) FSS allocation at 18.3-20.2 GHz. The Commission allocated the 18.3-18.8 GHz downlink segment for primary GSO FSS use and the 18.8-19.3 GHz downlink segment for primary NGSO FSS use.[26] Further, it indicated that because deployment of other services in the 18.3-18.8 GHz band would "unreasonably inhibit ubiquitous" deployment of NGSO FSS services, it would preclude other services -- including GSO FSS -- from using this band on even a non-interference basis.[27] Thus, contrary to EchoStar's assertions, the Commission has *already* considered exhaustively and ruled on domestic allocation issues in the Ka-band. This is not the type of situation envisioned by the Commission when it indicated in the *Space Station Licensing Reform Order* that it would consider applications after an international allocation has been adopted but before the domestic allocation has been implemented.

12. EchoStar states, however, that the *Space Station Licensing Reform Order* requires the Commission to disregard its prior determination to segment the Ka-band between GSO and NGSO systems. It asserts that where there are no service rules establishing criteria for sharing between GSO and NGSO systems, as is the case here, the Commission must consider applications on a "going forward basis" according to the procedures applicable to the kind of application that is filed first, *e.g.,* GSO-like or NGSO-like, after the effective date of the new processing rules.[28] The fact that pending NGSO FSS Ka-band applications were filed well before the *Space Station Licensing Reform Order* was adopted should not, according to EchoStar affect our disposition of that portion of its application in the NGSO Ka-band.[29]

13. Northrop Grumman and Hughes dispute EchoStar's claim that the Commission's policy of accepting applications of the "kind that is filed first" in the absence of GSO/NGSO sharing rules does not preclude acceptance of EchoStar's applications. Northrop Grumman notes that three NGSO FSS applications seeking to operate in the Ka-band were filed over six years ago, pursuant to rules establishing bands for NGSO FSS primary operations.[30] Hughes states that this provision applies in cases where service rules have not yet been adopted. In this instance, Hughes states, service rules exist and are clear that there is to be no GSO FSS sharing unless appropriate sharing criteria are developed in a

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Multipoint Distribution Services and for Fixed Satellite Services, *First Report and Order and Fourth Notice of Proposed Rulemaking*, 11 FCC Rcd 19005 (1996) (*Ka-band Plan Order*).

[24] *Id.* at 10929.

[25] *Ka-band Plan Order,* 11 FCC Rcd at 19024.

[26] Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use, *Report and Order*, 15 FCC Rcd 13430 (2000); *aff'd* 16 FCC Rcd 19808 (2001).

[27] *Id*. at 13459.

[28] *EchoStar Applications* at 13.

[29] *EchoStar Applications* at 14.

[30] *Northrop Grumman Petition* at 7.

rulemaking.[31] Further, Hughes states that EchoStar cannot provide the necessary information in support of its request unless and until a rulemaking is held to adopt NGSO/GSO sharing criteria.[32]

14. We agree with Hughes that the Commission stated it would consider applications of the kind that is filed first only where there *were no service rules* establishing criteria for sharing between GSO and NGSO satellite systems in those particular bands.[33] As noted, the Commission has already addressed the issue of GSO/NGSO sharing in the Ka-band and determined that sharing is not now possible. Accordingly, the Commission adopted a band segmentation plan. Although EchoStar asserts that none of the pending NGSO applicants are likely to use the primary NGSO spectrum in the near future, this does not alter the Commission's allocation of this spectrum to NGSO services or its consideration of GSO applications in this band.

15. Consequently, we will treat EchoStar's application as we would any other application that requests to operate in frequencies in which there are service rules and where other services have primary status. That is, we examine whether EchoStar has demonstrated that its proposed system can operate in a manner that will not cause harmful interference to any primary services, and whether EchoStar has justified any necessary waivers of the Table of Frequency Allocations.

2. Interference Issues

a. Earth-to-Space Link

16. EchoStar's proposed uplink band at 28.6-29.1 GHz is designated to NGSO FSS on a primary basis and to GSO FSS on a secondary basis. EchoStar has not demonstrated that it can operate on a non-interference basis to NGSO FSS systems in the band. EchoStar acknowledges that the bands in which it proposes to operate are designated on a primary basis to NGSO FSS. Nevertheless, it alleges that we should grant its application because it agrees to "immediately cease" operations upon notification of harmful interference from NGSO FSS operators.[34] This is not sufficient. In considering requests to operate on a secondary basis, the Commission has always required applicants to demonstrate that their proposed secondary operations are not likely to cause interference to primary operations.[35] To do otherwise would create an unacceptable likelihood of disruption to primary services. Nothing in the *Space Station Licensing Reform Order* changes this required showing for secondary operations. EchoStar did not submit a technical showing demonstrating it could operate compatibly with NGSO FSS systems. Consequently, we are not in a position to grant EchoStar's request.

17. This action is consistent with Commission action on similar requests to operate GSO systems in the NGSO portion of the Ka-band. In Astrolink International, for example, the Satellite Division stated that before GSO FSS systems could operate on a non-harmful interference basis relative to NGSO FSS systems, an interference protection level must be established to protect NGSO FSS operations and such studies have not been completed. [36] Absent NGSO FSS protection criteria, the

[31] *Hughes Petition* at 7.

[32] *Hughes Petition* at 8.

[33] *Space Station Licensing Reform Order*, 18 FCC Rcd at 10786.

[34] *EchoStar Applications* at 15.

[35] *See, e.g.,* Qualcomm, Inc., *Memorandum Opinion, Order and Authorization*, 4 FCC Rcd 1543, 1544 (1989) (authorization conditioned to protect services with primary status).

[36] Astrolink International, LLC, *Order and Authorization*, 16 FCC Rcd 20124, 20127 (2001) (*Astrolink International)*. *See also* GE American Communications, Inc., *Memorandum Opinion and Order*, 16 FCC Rcd 14306 (Int'l Bur. 2001).

Commission cannot fully assess the impact that proposed GSO and NGSO sharing will have on NGSO FSS operations. Consequently, this portion of Astrolink's application was dismissed because it did not make the required technical showing that its proposed system could operate on a non-harmful interference basis to primary NGSO FSS systems in the NGSO portion of the Ka-band.[37] Similarly, EchoStar failed to provide a showing that it can operate on a non-harmful interference basis to primary NGSO FSS operations in the 28.6-29.1 GHz band. Contrary to EchoStar's assertion, nothing in the *Space Station Licensing Reform Order* renders this requirement moot.[38] Thus, we deny EchoStar's request to operate GSO FSS uplinks in the 28.6-29.1 GHz frequency band.

b. Space-to-Earth Link

18. EchoStar proposed to operate its downlinks in the 18.8-19.3 GHz frequency band. EchoStar notes that Section 2.106 of the Commission's rules, specifically footnote NG 165, prohibits GSO FSS use of this band. EchoStar requests a waiver of this rule, asserting that allowing it to use the spectrum for its proposed GSO FSS operations would increase the likelihood that the spectrum, at present unused, would be put to productive use to the benefit of U.S. consumers.[39] Hughes comments that there is no basis to support EchoStar's waiver request.[40] Northrop Grumman states that EchoStar failed to show that a waiver would not undermine the policy objective of the rule in question, which establishes a dedicated band for NGSO FSS use on primary basis to encourage the development of such systems without concern for protecting GSO FSS operations. Without a rulemaking to determine that these objectives no longer apply, there is no basis to ignore the Commission's explicit findings. Nor is there a public interest justification for a waiver in favor of a single applicant. Northrop Grumman states if there are policy justifications for altering the rules, it should be done in a rulemaking proceeding where opportunities created by the changes are available to all interested parties.[41]

19. Section 1.3 of the Commission's rules authorizes the Commission to waive its rules for "good cause shown."[42] Waiver is appropriate only if special circumstances warrant a deviation from the general rule, and such deviation would better serve the public interest than would strict adherence to the general rule.[43] Generally, the Commission may grant a waiver of its rules in a particular case only if the relief requested would not undermine the policy objective of the rule in question and would otherwise serve the public interest.[44] In considering requests for non-conforming spectrum uses, the Commission has indicated that it would generally grant such waivers "when there is little potential for interference into any service authorized under the Table of Frequency Allocations and when the non-conforming operator accepts any interference from authorized services."[45]

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[37] *Astrolink International*, 16 FCC Rcd at 20127.

[38] *EchoStar Consolidated Opposition* at 11.

[39] *EchoStar Applications* at 16.

[40] *Hughes Petition* at 7.

[41] *Northrop Grumman* at 10.

[42] *See* Section 1.3 of the Commission's rules, 47 C.F.R. §1.3. *See also Wait Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969) (*Wait Radio*); *Northeast Cellular Tel. Co. v. FCC*, 897 F.2d 1166 (D.C. Cir. 1990) (*Northeast Cellula*r).

[43] *Northeast Cellular*, 897 F.2d at 1166.

[44] *Wait Radio*, 418 F.2d at 1577.

[45] Fugro-Chance, Inc., *Order and Authorization*, 10 FCC Rcd 2860 (Int'l Bur. 1995) authorizing non-conforming MSS in the C-Band; Motorola Satellite Communications, Inc., *Order and Authorization*, 11 FCC Rcd 13952, 13956 (Int'l Bur. 1996).

20. Under this standard, we agree with Northrop Grumman that allowing GSO FSS services in the 18.8-19.3 GHz band would undermine the policy that led to the establishment of the rule, namely providing spectrum for NGSO FSS systems to operate without harmful interference from or the need to protect GSO FSS systems. EchoStar's speculation that the NGSO spectrum will remain fallow, when there are three applications pending before the Commission, is not good cause for a waiver. We find that EchoStar's waiver request does not demonstrate that adherence to the policy is unnecessary or counter to the public interest.[46] Thus, we deny its request to operate GSO FSS downlinks in the 18.8-19.3 GHz frequency band.

B. Ku-Band Request

21. EchoStar also requests authority to use spectrum in the extended Ku-band frequencies, 10.95 -11.2 GHz, 11.45-11.7 GHz (space-to-Earth) and 13.75-14.00 GHz (Earth-to-Space), for its two proposed hybrid satellites.[47] EchoStar proposes one-way direct-to-home services to the United States, Puerto Rico, the U.S. Virgin Islands, and parts of Canada and Mexico. None of the petitioners commented on this portion of the application. Although the ITU has allocated the 10.7-11.7 GHz "extended" Ku-band frequencies to the fixed-satellite service, under Section 2.106, footnote NG 104 and Section 25.202(a)(1), footnote 2, the Commission limits FSS use of these bands to international satellite service and prohibits domestic use. In the United States, use of the 10.95-11.2 GHz and 11.45-11.7 GHz frequency bands is also allocated to the terrestrial wireless service, and FSS is prohibited from using these frequencies domestically in order to limit the number of FSS earth stations with which the terrestrial fixed-service would be required to coordinate.[48] Consequently, a U.S. licensed satellite may provide downlink services into the United States and its possessions in the 10.95-11.2 GHz or 11.45-11.7 GHz frequency band only if the uplinks originate outside of the United States and its possessions. EchoStar's applications, however, show that it intends to provide downlink service into the United States originating from uplinks also arising in the United States.[49] EchoStar did not request a waiver of footnote NG 104 or Section 25.202(a)(1), footnote 2, in its application. The Bureau has rejected other applications for failure to request a similar waiver.[50] Therefore, we also deny that portion of EchoStar's applications seeking to

[46] In its applications, EchoStar also requested a waiver of Section 25.210(e) of our rules. *EchoStar Applications* at 17. This rule, which required FSS space stations to use both horizontal and vertical polarization, was eliminated in the *Space Station Licensing Reform Order*, 18 FCC Rcd at 10860 .

[47] EchoStar proposes operations in both the allotted and non-allotted Ku-band frequencies. The allotted frequencies, 10.70-10.95 GHz and 11.20-11.45 GHz (space-to-Earth) and 12.75-13.25 GHz (Earth-to-space), are allotted to individual countries to various specific satellite orbit locations. Both the allotted and non-allotted, 10.95-11.2 and 11.45-11.7 GHz (space-to-Earth), 13.75-14.00 GHz (Earth-to-space), bands are allocated to FSS, however, each is subject to different regulations established by the International Telecommunication Union. *See* ITU Radio Regulations, Articles 5, 9, 11, and Appendix 30B.

[48] Assignment of Orbital Locations to Space Stations in the Domestic Fixed Satellite Service and the Applications of GE American Communications, Inc., *Order and Authorization*, 15 FCC Rcd 3385 (Int'l Bur. 1999).

[49] EchoStar provides representative extended Ku-band link budgets showing uplinks in Cheyenne, Wyoming with downlinks to New York and Los Angeles. *EchoStar Applications*, SAT-LOA-20030827-00185 and SAT-LOA-20030827-00185, Attachment A, pp. 18-21.

[50] EchoStar KuX Satellite Corporation, Letter to David Moskowitz, Senior Vice President and General Counsel, from Thomas S. Tycz, Chief, Satellite Division, 18 FCC Rcd 25666 (Sat. Div., Int'l Bur. 2003) (finding that EchoStar must request the appropriate waivers of 2.106, footnote NG 104, and 25.202(a)(1) and provide justification that adherence to Commission policy is unnecessary or counter to the public interest); *see also* Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service and the Applications of GE American Communications, Inc., *Memorandum Opinion and Order*, 15 FCC Rcd 3385 (Sat. Div., Int'l Bur. 1999) (denying GE's request for waiver of NG 104 denied because its proposed use would undermine the policy objectives of limiting use to international systems).

operate downlink services in the extended Ku-band frequencies. As a result, the remaining portion of EchoStar's applications are limited to use of the 13.75-14.0 GHz frequencies for its uplink operations. The use of uplink frequencies only does not allow for a viable satellite system, thus we dismiss this portion of the applications as incomplete.

C. Other Issues

22. New Skies has been authorized by the Netherlands to operate a satellite at the 105° W.L. orbital location using frequencies requested by EchoStar. New Skies requests that if the EchoStar application for the 105° W.L. orbital location is granted, that it be conditioned to reflect New Skies' ITU priority. EchoStar responds that the conditions are unnecessary and onerous. Because we deny EchoStar's application to operate a satellite at the 105° W.L. orbital location, we need not address New Skies' comments.

IV. CONCLUSION AND ORDERING CLAUSES

23. Based on the foregoing, we deny EchoStar's request to operate GSO FSS satellites using the NGSO FSS Ka-band frequencies. We also find that EchoStar failed to show good cause for a waiver of the Commission's rules designating the spectrum to NGSO FSS on an exclusive primary basis. In addition, we deny those portions of EchoStar's applications requesting use of the extended Ku-band in the 10.95-11.2 GHz and 11.45-11.7 GHz frequencies. Because the remaining portion of EchoStar's applications does not allow for a viable satellite system, we also dismiss EchoStar's request to use the extended Ku-band, 13.75-14.0 GHz, for its proposed uplink operations.

24. Accordingly, IT IS ORDERED, that the Applications filed by EchoStar Satellite LLC, SAT-LOA-20030827-00180 (to operate a GSO satellite at 121° W.L.) and SAT-LOA-20030827-00182 (to operate a GSO satellite at 83° W.L.), are DENIED.

25. It is FURTHER ORDERED, that the Applications of EchoStar Satellite LLC, SAT-LOA-20030827-00185 (to operate a hybrid GSO satellite at 113° W.L.) and SAT-LOA-20030827-00187 (to operate a hybrid satellite at 105° W.L.) are DENIED IN PART and DISMISSED IN PART, without prejudice, as specified in this Order.

26. It is FURTHER ORDERED, that EchoStar Satellite LLC's request for waiver of 47 C.F.R. § 2.106, footnote NG 165, is DENIED.

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

FEDERAL COMMUNICATIONS COMMISSION

Thomas S. Tycz
Chief
Satellite Division
International Bureau