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

In the Matter of	)	File Nos. 101-SAT-P/LA-98 102-SAT-P/LA-98
KaStarCom. World Satellite, LLC	)	IBFS Nos. SAT-LOA-19980312-00019
Application for Authority to Construct,	)	SAT-LOA-19980312-00018
Launch, and Operate a Ka-Band Satellite	)	SAT-AMD-20010607-0050
System in the Fixed-Satellite Service	)	Call Sign S2355
	)	
	)	

ORDER AND AUTHORIZATION

Adopted: August 2, 2001 **Released: August 3, 2001**

By the Chief, International Bureau:

I. INTRODUCTION

1. By this Order, we authorize KaStarCom. World Satellite, LLC ("KaStarCom") to launch and operate a satellite in geostationary-satellite orbit to provide fixed-satellite services ("FSS") in the Ka-band.[1] In a companion order, issued today, we assign KaStarCom's satellite to the 111° W.L. orbital location.[2] This will allow KaStarCom an opportunity to provide consumers access to a variety of competitive satellite communications services in a frequency band suitable for advanced broadband, interactive services. We defer action on KaStarCom's other applications, as recently amended, requesting authority to share two other orbital locations with the existing Ka-band licensee, WB Holdings 1 LLC ("WB Holdings").[3]

II. BACKGROUND

2. KaStarCom is one of 12 applicants seeking authority to operate geostationary-satellite orbit ("GSO") satellites in the second Ka-band processing round. In May 1997, the International Bureau licensed 13 applicants to launch and operate GSO satellite systems as part of the first Ka-band processing round ("First Round").[4] In October 1997, the Bureau established a second processing round ("Second

[1] For purposes of this order, the term "Ka-band" or "28 GHz band" refer to the space-to-Earth communications (downlink) in radio frequencies at 17.7-20.2 GHz and the corresponding Earth-to space communications (uplink) in frequencies at 27.5-30.0 GHz. We authorize KaStarCom to operate in a portion of these frequency bands indicated in this order.

[2] *Second Round Assignment of Geostationary Satellite Orbit Locations to Fixed Satellite Service Space Stations in the Ka-Band, Order*, DA 01-1693 (Int'l Bur. rel. August 3, 2001) ("*Second Round GSO Assignment Order*").

[3] *See* Public Notice, Satellite Policy Branch Information, Applications Accepted for Filing, KaStarCom. World Satellite, LLC, SAT-AMD-20010607-0050 (June 19, 2001).

[4] The Bureau also licensed one non-geostationary-satellite orbit ("NGSO") Ka-band system. See Teledesic Corporation, Application for Authority to Construct, Launch and Operate a Low Earth Orbit Satellite System in the Domestic and International Fixed Satellite Service, Order and Authorization, 12 FCC Rcd 3154 (Int'l Bur. 1997).

Round"), inviting interested parties to file applications on or before December 22, 1997 for consideration in this round. The Second Round GSO licenses satellite systems, and in one case, reservation of orbit locations for a non-U.S. licensed satellite system, will enable new entrants to offer services competitive with those licensed in the First Round and will allow First Round licensees an opportunity to expand and improve the capabilities and service offerings of their licensed systems.

3. KaStarCom is a Delaware limited liability company. In its application, KaStarCom requested authority to launch and operate two satellites at the 175° W.L. and 52° E.L. orbital locations.[5] On June 7, 2001, KaStarCom filed an amendment requesting a change of orbital assignments and a change in the manner in which it will operate its system.[6] KaStarCom now proposes to launch and operate one Ka-band satellite at the 111º W.L. orbit location.[7] In addition, KaStarCom requests authority to share the 73º W.L. and 109.2º W.L. orbital locations with WB Holdings, a First Round licensee authorized to launch and operate satellites using 500 megahertz of Ka-band spectrum at these orbital locations.[8] Specifically, KaStarCom and WB Holdings jointly propose to construct and own a single satellite at each location with each licensee operating on 500 megahertz of spectrum.[9] KaStarCom proposes to provide high-speed, switched data, video, and video telephone satellite communications services to individual and business users on a non-common carrier basis.[10]

4. We act here on KaStarCom's application to launch and operate one satellite using 1000 megahertz of Ka-band spectrum. We defer action on its request to share two satellites with WB Holdings until we have had an opportunity to review the pleadings filed with respect to this request.[11]

5. For its proposed satellite at 111° W.L., KaStarCom proposes to operate in 1000 megahertz of spectrum in the 28.35-28.6 GHz and 29.25-29.5 GHz and 29.5-30.0 GHz frequency bands for uplink (Earth-to-space) communications and 1000 megahertz of spectrum the 18.3-18.8 GHz and 19.7-20.2 GHz

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[5] *See* Application of KaStarCom. World Satellite, LLC, File Nos. 101-SAT-P/LA-98 and 102-SAT-P/LA-98; IBFS Nos. SAT-LOA-19980312-00019 and SAT-LOA-19980312-00018 (December 22, 1997)("*KaStarCom Application*").

[6] *See* Letter from Stephen E. Coran, Counsel to KaStarCom World Satellite, LLC to Magalie Roman Salas, Secretary, Federal Communications Commission (June 1, 2001). *See also* Letter from Stephen E. Coran, Counsel to KaStarCom World Satellite, LLC to Magalie Roman Salas, Secretary, Federal Communications Commission (June 7, 2001). *See also* Public Notice, Satellite Policy Branch Information, Applications Accepted for Filing, KaStarCom. World Satellite, LLC, SAT-AMD-20010607-0050 (June 19, 2001).

[7] *Id.*

[8] *See In the Matter of KaStar Satellite Communications Corporation Application for Authority to Construct, Launch, and Operate a Ka-band Satellite System in the Fixed-Satellite Service*, 13 FCC Rcd 1366 (1997) ("*WB Authorization Order*"). In a series of name changes and pro forma transfers of control and assignments, Ka-Star became iSky, which in turn, became Wildblue Communications, Inc. Wildblue Communications, Inc. is the parent company of WB Holdings 1 LLC. *See* letter from William M. Wiltshire, Counsel, WB Holdings 1 LLC, to Magalie Roman Salas, Secretary, Federal Communications Commission (November 3, 2000). *See also* letter from William M. Wiltshire, Counsel, WB Holdings 1 LLC, to Magalie Roman Salas, Secretary, Federal Communications Commission (January 8, 2001). Request for Pro Forma Assignment of License of KaStar 73 Acquisition, LLC to WB l LLC (File No. SAT-ASG-20010108-00004).

[9] *See* Letter from Stephen E. Coran, Counsel to KaStarCom World Satellite, LLC to Magalie Roman Salas, Secretary, Federal Communications Commission (June 7, 2001). *See also* Public Notice, Satellite Policy Branch Information, Applications Accepted for Filing, KaStarCom. World Satellite, LLC, SAT-AMD-20010607-0050 (June 19, 2001).

[10] KaStarCom Application at p. 8.

[11] The pleading cycle closed on July 13, 2001. We expect to issue an order acting upon the proposed WB Holdings/KaStarCom satellites shortly.

frequency bands for service downlink (space-to-Earth) operations.[12] KaStarCom also requests authority to conduct its tracking, telemetry and command functions during transfer orbit operations in the C-band frequencies.[13] Finally, it requests authority to operate intersatellite links ("ISLs") in the 69.0-70.0 GHz frequency bands.[14]

6. Several Second Round Ka-band applicants filed petitions to deny the KaStarCom application.[15] Petitioners assert that KaStarCom should not be awarded any satellite licenses because KaStarCom has not demonstrated that it has met the Commission's financial qualification rules.[16] Pegasus argues that KaStarCom's ownership interest in Directcom, another Second Round applicant, should be considered when assigning orbital locations. In addition, Pegasus argues that KaStarCom should not be treated as a new entrant because of its ownership interest in WB Holdings, a First Round licensee.[17] Accordingly, Pegasus contends that KaStarCom should not be assigned any orbital locations within that portion of the geostationary arc that is capable of serving the contiguous United States ("CONUS").[18]

III. DISCUSSION

A. Qualifications

7. All applicants requesting authority to launch and operate satellite space stations must present information sufficient to establish their legal, technical, and financial qualifications to hold a Commission license. The rules set forth in Part 25 of the Commission's rules govern FSS applicants and licensees, including this application for GSO FSS in the Ka-band frequencies. The Commission modified the Part 25 FSS rules in 1997 to incorporate the particular technical requirements for operations in the Ka-band frequencies.[19] In this and other licenses issued to Second Round FSS applicants in the Ka-band, we will

[12] *See* Letter from Stephen E. Coran, Counsel to KaStarCom World Satellite, LLC to Magalie Roman Salas, Secretary, Federal Communications Commission (June 1, 2001). *See also* Letter from Stephen E. Coran, Counsel to KaStarCom World Satellite, LLC to Magalie Roman Salas, Secretary, Federal Communications Commission (June 7, 2001).

[13] *Id.* KaStarCom requests authority to conduct transfer orbit command functions in the 5.8565-5.8600 GHz and 6.4205-6.4240 GHz band and its telemetry functions in the 3.7000-3.7035 GHz bands and 4.1960-4.1995 GHz bands.

[14] ISLs are communication links between in-orbit satellites. ISLs operate in spectrum allocated to the inter-satellite service. *See* International Telecommunication Union Radio Regulation S1.22.

[15] Consolidated Reply to Oppositions of Pegasus, July 2, 1999, Consolidated Petition to Deny filed by Pegasus Development Corporation, filed May 25, 1999, Motorola's Consolidated Petition To Deny And Comments, filed May 21, 1999 and Consolidated Petitions to Dismiss, Deny or Defer of Hughes Communications Galaxy, Inc. and Hughes Communications Inc., filed May 21, 1999. Hughes contends that KaStarCom's proposed satellites do not comply with the Commission's two-spacing requirement and requests us to defer processing KaStarCom's application until KaStarCom can demonstrate that operation of its proposed satellite at 52° E.L. will not cause harmful interference to Hughes' licensed Ka-band satellite located at 54º E.L. Because KaStarCom no longer seeks assignment to the 52° E.L. orbit location, Hughes' objection is moot.

[16] Motorola's Consolidated Petition to Deny and Comments, filed May 21, 1999 and Consolidated Petitions to Dismiss, Deny or Defer of Hughes Communications Galaxy, Inc. and Hughes Communications Inc., filed May 21, 1999.

[17] Consolidated Reply to Oppositions of Pegasus, July 2, 1999, and Consolidated Petition to Deny filed by Pegasus Development Corporation., filed May 25, 1999,

[18] All issues pertaining to the assignment of orbit locations are addressed in the *Second Round GSO Orbital Assignment Order* released today.

[19] 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

generally apply all Part 25 FSS rules, specifically noting, however, where we decide not to apply existing rules.

1. Number of Orbit Locations

8. The Commission's Part 25 FSS rules include a limit on the number of orbit locations that may initially be assigned to a qualified GSO FSS applicant.[20] The rules also limit the number of additional, expansion orbit locations that may be assigned to applicants with previously licensed systems using the same frequency bands.[21] 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.[22] The Commission waived the assignment limit rules in the first Ka-Band GSO FSS round because the applicants had agreed to an arrangement that accommodated all pending applications for space stations and left room for additional assignments.[23] In this Second Round, we have determined that we can also accommodate all pending requests for space stations, with room for additional entry. We therefore again waive application of the Commission rule limiting GSO FSS orbit locations.[24] Consequently, we will not, as some applicants request, limit the number of assignments to Second Round applicants.

2. Technical Qualifications

9. Applicants for FSS space station authorizations must meet the technical qualification requirements set forth in the Commission's Part 25 rules. These requirements are designed primarily to implement two-degree orbital spacing between GSO FSS satellites. The Commission's two-degree spacing policy, which was established in 1983, was designed to maximize the number of satellites in orbit by ensuring that satellites in geostationary-satellite orbit can operate without causing harmful interference to other GSO satellites located as close as two degrees. [25]

10. In the *Ka-Band FSS Rules Order*, the Commission adopted its proposal to extend its two-degree spacing policy between in-orbit satellites to space stations in the Ka-band.[26] We believe that it remains in the public interest to maximize the number of satellites that can be accommodated in orbit by extending the Commission's existing two-degree GSO spacing policy to Ka-band orbital assignments in the Second Round. All GSO FSS licensees in the Second Round will therefore be required to be two-degree GSO spacing compliant.

11. KaStarCom indicates that its system design is consistent with operation in a two-degree spacing environment.[27] Our review of KaStarCom's finds nothing to preclude operation in a two-degree spacing environment. The Second Round Ka-band applications were received subsequent to the *Ka-Band*

Multipoint Distribution Service and for Fixed Satellite Services, Third Report and Order, FCC 97-378, 12 FCC Rcd 22310 (1997)("Ka-Band FSS Rules Order"); Memorandum Opinion and Order, FCC 01-172 (rel. May 25, 2001) (order on petitions for clarification or reconsideration).

[20] 47 C.F.R. § 25.140(e).

[21] 47 C.F.R. § 25.140(f).

[22] *WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969).

[23] *Ka-Band FSS Rules Order*, 12 FCC Rcd at 22320 ¶ 24.

[24] For a more detailed discussion, *see Second Round GSO Assignment Order*, at ¶17.

[25] *Licensing of Space Stations in the Domestic Fixed-Satellite Service*, 54 Rad. Reg. 2d (P&F) 577, 589 (1983) ("*Two-Degree Spacing Order*").

[26] *Ka-Band FSS Rules Order*, 12 FCC Rcd at 22320 ¶ 23.

[27] KaStarCom Application at. 117.

FSS Rules Order but prior to the *18 GHz Band Report and Order*.[28] In both orders, rules affecting two-degree orbital spacing were adopted. We remind KaStarCom of its continuing obligation to meet all Part 25 rules governing system operations, including Sections 25.202 (frequencies, frequency tolerances, and emission limitations) and Section 25.210 (technical requirements for space stations in the Fixed-Satellite service).[29] Further, KaStarCom must meet the current Ka-band power flux-density ("pfd") limits of Section 25.208 which were adopted after KaStarCom filed its application.[30] As a condition of this authorization, KaStarCom must meet thee revised pfd limits.

3. Financial Qualifications

12. The Commission's FSS rules require that an applicant for a new fixed-satellite system possess sufficient financial resources to cover the construction, launch, and first-year operating costs of each proposed satellite.[31] We have waived these rules, however, in those cases where we can accommodate all pending applications. The Commission's financial qualification rules are designed to prevent under-capitalized licensees from holding valuable orbit spectrum resources to the exclusion of others while they attempt to arrange financing to construct and launch the licensed system. Where all applicants can be accommodated, however, granting a license to an under-capitalized applicant will not prevent another applicant from going forward. [32] In addition, there is a pro-competition public interest benefit in licensing all applicants, if possible. We waived the financial qualifications rules for the First Round applicants because all of those applicants could be accommodated in the available orbital locations and there were additional orbital locations available for future entrants.[33] In the accompanying *Second Round GSO Assignment Order*, we also determine that we can accommodate all pending Second Round applicants' requests for FSS space stations in the Ka-band, and still have orbital locations available for future entrants. We therefore waive the financial qualification requirements for Second Round applicants. Consequently, it is unnecessary to rule on KaStarCom's financial qualifications. The petitions to deny filed by Motorola, Inc. and Hughes Communications Galaxy, Inc. raising issues regarding KaStarCom's financial qualifications are therefore rendered moot.

B. Spectrum Assignments

1. Service Links

13. In the *28 GHz Band First Report and Order*, the Commission adopted a band segmentation plan that designated one gigahertz of spectrum in each transmission direction for GSO FSS Ka-band systems.[34] For uplink (Earth-to-space) transmissions, the Commission designated 250 megahertz of

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[28] *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*, FCC 00-212, 15 FCC Rcd 13,430 (2000) *("18 GHz Band Report and Order").*

[29] 47 C.F.R. §§ 25.202 and 25.210.

[30] 47 C.F.R. §25.208.

[31] 47 C.F.R. § 25.140(b)-(e).

[32] *See generally Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626/2483.5-2500 MHz Frequency Bands, Report and Order*, 9 FCC Rcd 5936 at ¶ 26 (1994) ("*Big LEO Report and Order*").

[33] *See Ka-Band FSS Rules Order*, 12 FCC Rcd at 22318 ¶ 18.

[34] *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, First Report and Order and Fourth Notice of Proposed Rulemaking*, FCC 96-311, 11 FCC Rcd 19005 (1996) *("28 GHz Band First Report and Order").*

spectrum between 28.35 and 28.6 GHz, 250 megahertz of spectrum between 29.25 and 29.5 GHz (shared on a co-primary basis with non-geostationary satellite orbit, mobile satellite service feeder links), and 500 megahertz of spectrum between 29.5 and 30.0 GHz for GSO FSS operations. For downlink (space-to-Earth) communications, the Commission designated 1100 megahertz of spectrum between 17.7 and 18.8 GHz for GSO FSS operations (shared on a co-primary basis with terrestrial fixed-service) and 500 megahertz of spectrum between 19.7 and 20.2 GHz for primary GSO FSS operations. The Commission later refined the downlink plan for the frequency band between 17.7 and 18.8 GHz, by designating 280 megahertz of spectrum between 18.3 and 18.58 GHz for co-primary GSO FSS and terrestrial fixed service operations and 220 megahertz of spectrum between 18.58 and 18.8 GHz for primary GSO FSS operations.[35]

14. In its amended application, KaStarCom proposes to use 1000 megahertz of spectrum in the 28.35-28.6 GHz and 29.25-29.5 GHz and 29.5-30.0 GHz frequency bands for its service uplinks at the 111º W.L. orbital location. This request is consistent with the 28 GHz band plan, and we will therefore authorize KaStarCom to operate in these frequencies, subject to the sharing rules adopted in the *28 GHz Band First Report and Order*.

15. In its amended application, KaStarCom proposes to use 1000 megahertz of spectrum in the 18.3-18.8 GHz and 19.7-20.2 GHz frequency bands for its service downlink bands. We grant this request consistent with the 18 GHz band plan.[36] Specifically, we authorize KaStarCom to operate its service downlinks in 1000 megahertz of spectrum in the 18.3-18.8 GHz and 19.7-20.2 GHz frequency bands. Because the 280 megahertz of spectrum at 18.3-18.58 GHz is to be shared on a co-primary basis with terrestrial-fixed services, GSO FSS operations in this band must be coordinated with these terrestrial operations.

16. In addition, KaStarCom must coordinate with U.S. Government systems operating in accordance with footnote US334 to the Table of Frequency Allocations.[37] This footnote requires coordination of commercial systems with U.S. Government GSO and NGSO FSS systems that are presently operating throughout the 17.8-20.2 GHz frequency band. These Government systems operate in accordance with the power flux-density limits contained in the current International Telecommunication Union ("ITU") Radio Regulations.[38] KaStarCom must also comply with footnote US255 to the Table of Frequency Allocations that contains power flux-density limits to protect the Earth exploration satellite service (passive) for the 18.6-18.8 GHz band.[39]

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[35] *See 18 GHz Band Report and Order.* Stations operating in primary services are protected against interference from stations of "secondary" services. Moreover, stations operating in a secondary service cannot 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).

[36] *See 28 GHz Band First Report and Order*, 11 FCC Rcd 19005, as modified in *18 GHz Band Report and Order* 15 FCC Rcd at 13443, ¶ 28.

[37] *See* 47 C.F.R. § 2.106 US334.

[38] *See 18 GHz Report and Order*, 15 FCC Rcd at 13473 ¶ 90. The power flux-density limits in the 18.3-18.6 GHz band are -115/-105 dB (W/m^2) in any one megahertz band, depending upon the angle of arrival. There are currently no power flux-density limits in the 19.7-20.2 GHz band. *See* Letter from William T. Hatch, National Telecommunications and Information Administration, to Dale Hatfield, Chief, Office of Engineering and Technology, Federal Communications Commission (March 29, 2000).

[39] 47 C.F.R. § 2.106 US255 (as revised in the *18 GHz Band Report and Order*, 15 FCC Rcd at 13489) states: In addition to any other applicable limits, the power flux-density across the 200 MHz band 18.6-18.8 GHz produced at the surface of the Earth by emissions from a space station under assumed free-space propagation conditions shall not exceed –95db(W/m2) for all angles of arrival. This limit may be exceeded by up to 3 dB for no more than 5% of the time.

2. Inter-Satellite Links

17. KaStarCom plans to use ISLs between adjacent satellites to provide connectivity between the coverage regions of different satellite orbit locations. KaStarCom proposes to link the satellites licensed to WB Holdings in the first processing round at the 73º W.L. and 109.2 º W.L. orbital locations with the 111º W.L. orbit location. Because we are deferring action on issues concerning its joint venture with WB Holdings and because we are licensing KaStarCom for only one satellite in this Order, we find that it is premature to act on its ISL request at this time.

3. Tracking, Telemetry and Command

18. Under the Commission's rules, tracking, telemetry and command ("TT&C") operations may be provided at the edges of the frequency bands in which the particular satellite will be providing service.[40] KaStarCom proposes to conduct TT&C functions in the system service band. We authorize KaStarCom to conduct TT&C operations in these service bands.

19. KaStarCom also requests authority to conduct TT&C operations outside its Ka-band service frequencies. Specifically, KaStarCom proposes to conduct its command functions in the 5856.5-5860 MHz and 6420.5-6424 MHz bands and its telemetry functions in the 3700-3703.5 MHz and 4196-4199.5 MHz bands. All of these requested operations are within the C-band frequencies, which are not the system's service band. Thus, the request is not consistent with Section 25.202 of the rules.[41] As the Commission recently indicated, this rule serves the valid purpose of simplifying coordination among satellites at adjacent orbital locations, and promoting efficient spectrum use.[42] KaStarCom has not provided a showing to demonstrate that a waiver of Section 25.202(g) for TT&C operations outside its service band would be consistent with the basic purpose of the rule, or that the public interest otherwise requires a waiver. Thus, we deny KaStarCom's request. KaStarCom should be aware that there are potential allocation and electromagnetic compatibility issues in the 5850-5925 MHz band, therefore, the band may not be available to support its TT&C requirements.[43]

C. Regulatory Treatment

20. In the *DISCO I Order*, the Commission determined that all fixed-satellite service operators in the C-band and Ku-band could elect to operate on a common carrier or non-common carrier basis.[44] The Commission extended this treatment to satellite operators in the Ka-band in the *Ka-Band FSS Rules Order*.[45] Consequently, Second Round Ka-band applicants may elect their regulatory status. KaStarCom has elected to operate on a non-common carrier basis, and we authorize it to do so.[46]

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[40] 47 C.F.R § 25.202(g).

[41] *See Amendment of the Commission's Rules With Regard to the 3650-3700 MHz Government Transfer Band*, FCC 00-363, 15 FCC Rcd 20488, 20538 ¶ 129 (the rule "effectively limits FSS operators to operating TT&C links in the same frequency bands as their FSS operations").

[42] *Id.* at ¶¶ 129-130.

[43] *See* 47 C.F.R. § 2.106 US245. *See also* NTIA Report-83-115, *Spectrum Resource Assessment in the 5650-5925 MHz Band*; and FCC 77-349 (rel. May 23, 1977) (which includes discussion of the sharing issues between the radiolocation and fixed-satellite service operations in the band 5850-5925 MHz).

[44] *See In the Matter of Amendment to the Commission's Regulatory Policies Governing Domestic Fixed Satellites and Separate International Satellite Systems and DBSC Petition for Declaratory Rulemaking Regarding the Use of Transponders to Provide International DBS Service*, 11 FCC Rcd 2429, 2436 (1996) (*"DISCO I Order").*

[45] *Ka-band FSS Rules Order*, 12 FCC Rcd at 22333 at ¶¶ 58-60.

[46] *See* KaStarCom Application, FCC Form 312.

D. License Conditions

1. Milestone Schedule

21. As in all other satellite services, all Second Round Ka-band licensees will be required to adhere to a strict timetable for system implementation. This ensures that licensees are building their systems in a timely manner and that the orbit-spectrum resource is not being held by licensees unable or unwilling to proceed with their plans. The implementation schedules for GSO FSS systems in the Ka-band generally track the schedules imposed in other satellite services.

22. Specifically, Section 25.145(f) of the Commission's rules requires Ka-band GSO FSS licensees "[1] to begin construction of [their] first satellite within one year of grant, [2] to begin construction of the remainder within two years of grant, [3] to launch at least one satellite into each of [their] assigned orbit locations within five years of grant, and [4] to launch the remainder of [their] satellites by the date required by the International Telecommunication Union to assure international recognition and protection of those satellites."[47] Failure to meet any of these construction milestones will render those satellite authorizations null and void without further action by the Commission.

23. The date by which KaStarCom's satellite must be "brought into use" to protect the date priority of the U.S. ITU filings for its service links at this orbital location is March 9, 2003, with a two-year extension available under certain circumstances.[48] We recognize that, in this case, comparing this ITU "bringing into use" date to our launch milestone has the incongruous result of our rules requiring KaStarCom to launch its satellite into its assigned orbit location by August 2006, *i.e.*, after both the earliest and latest dates by which KaStarCom is required to bring its satellite location into use to protect the date priority of the U.S. ITU filings for its orbital location. To address this misalignment, we require KaStarCom to launch its satellite into its licensed orbit location and "bring into use" all of the frequency assignments it plans to operate at that orbit location by the ITU "bringing into use" date. Should the ITU grant a two-year extension of the 2003 "bringing into use date," the launch milestone in this license will automatically change to the new ITU "bringing into use" date without further Commission action. This will protect the United States filings at these locations and thus, KaStarCom's ability to coordinate and gain international recognition for the satellite at its assigned orbit location. Moreover, we do not anticipate that meeting this milestone will be unduly difficult. Under standard industry practice, it generally takes two to three years to construct and launch a satellite.[49] KaStarCom will have nearly four

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[47] 47 C.F.R. § 25.145(f). *See Ka-Band FSS Rules Order*, 12 FCC Rcd at 22334-35 ¶ 61 & n.77 (1997).

[48] ITU Radio Regulations require that the satellite at 111° W.L. be brought into use by March 9, 2003. ITU Radio Regulations require that the satellite be "brought-into-use" ("BIU") no later than five years from the date the ITU publishes the advance publication information. (ITU Radio Regulations Article S11.44). The ITU may extend the BIU date by two years under the conditions specified in ITU Radio Regulations Articles S11.44B through S11.44I (launch failure; launch delays due to circumstances outside the control of the administration or operator; delays caused by modifications of satellite design necessary to reach coordination agreements; problems in meeting the satellite design specifications; delays in reaching coordination after a request for ITU Radiocommunication Bureau assistance; financial circumstances outside the control of the administration or operator; and force majeure). In cases where the two year extension is necessary, the licensee must inform the Commission, in writing, six months before the end of the five-year period so that the Commission can timely inform the ITU of the extension request. Should KaStarCom, indeed wish to extend its milestone at the 111º W.L. orbital location to 2005, it must provide the Commission, six months before March 9, 2003, information demonstrating good cause to request an ITU extension on the grounds specified in the ITU Radio Regulations.

[49] *See, e.g., In the Matter of the Application of Comsat Corporation*, 12 FCC Rcd 12059, 12075 ¶ 33 n. 68 (Int'l Bureau 1997)("It has been our experience that it takes an average of two years to construct and launch a satellite….").

years in which to launch its satellites into their assigned location by the ITU "bringing into use" date, assuming it receives an extension.

2. Reporting Requirements

24. We will follow the Part 25 rules for reporting requirements for FSS systems, including an annual report describing the status of satellite construction and anticipated launch date, and a detailed description of the use made of each transponder on its in-orbit satellite.[50] KaStarCom must file this report on June 30 of each year, containing information current as of May 31 of that year.

3. International Coordination

25. In general, we will follow the applicable advance-publication, coordination, and notification procedures as set forth in the ITU Radio Regulations in coordinating KaStarCom's satellite with other affected administrations. We will also require that KaStarCom provide the Commission with the international coordination information required by our rules.[51] The orbit location assigned today may be co-located or within two degrees of a non-U.S. licensed satellite filing having date priority in its ITU filings. Under these circumstances, U.S. licensees assigned to these locations are reminded that they take these licenses subject to the outcome of the international coordination process, and that the Commission is not responsible for the success or failure of the required international coordination.

IV. CONCLUSION

26. Upon review of KaStarCom's application, we find that KaStarCom is qualified to be a Commission licensee and that, pursuant to Section 309 of the Communications Act of 1934, as amended, 47 U.S.C. § 309, grant of this application will serve the public interest, convenience, and necessity. As specified in the *Second Round GSO Assignment Order*, we have assigned KaStarCom to the 111° W.L. orbital location.

V. ORDERING CLAUSES

27. IT IS ORDERED that Application File Nos. 101-SAT-P/LA-98 and 102-SAT-P/LA-98; IBFS Nos. SAT-LOA-19980312-00019, SAT-LOA-19980312-00018 and SAT-AMD-20010607-0050 ARE GRANTED IN PART, as discussed above, and KaStarCom. World Satellite, LLC IS AUTHORIZED to launch and operate one GSO FSS satellite, to provide fixed-satellite service in the 18.3-18.8 GHz and 19.7-20.2 GHz, 28.35-28.60 GHz and 29.25- 30.0 GHz frequency bands and frequency bands at the 111° W.L. orbital location.

28. IT IS FURTHER ORDERED that KaStarCom. World Satellite, LLC's authorization shall become NULL and VOID with no further action on the Commission's part in the event the space station is not constructed, launched, and placed into operation in accordance with the technical parameters and terms and conditions of this authorization by the following dates:

	Construction Commenced	Launch and Operate
Satellite at 111° W.L.	August 2002	March 9, 2003[52]

[50] *See* 47 C.F.R. § 25.210(l)(1)(2)(3).

[51] *See* 47 C.F.R. § 25.111(b).

[52] If the International Telecommunication Union grants a two-year extension of this date, this milestone will automatically change to March 9, 2005 without further Commission action.

29. IT IS FURTHER ORDERED that KaStarCom. World Satellite, LLC must coordinate its Ka-band downlink operations with U.S. Government systems, including Government operations to earth stations in foreign countries, in accordance with footnote US334 to the Table of Frequency Allocations, 47 C.F.R. §2.106, and in accordance with the *18 GHz Report and Order*, 15 FCC Rcd at 13473 at ¶ 90.

30. IT IS FURTHER ORDERED THAT KaStarCom. World Satellite, LLC shall conduct its operations pursuant to this authorization in a manner consistent with the power flux-density requirements of 47 C.F.R. § 2.106 US255 and §25.208 of the Commission's Rules.

31. IT IS FURTHER ORDERED that the license term for the space station is ten years and will begin to run on the date KaStarCom. World Satellite, LLC, Inc. certifies to the authorized Commission that the authorized satellite has been successfully placed into orbit and the operations fully conform to the terms and conditions of this authorization.

32. IT IS FURTHER ORDERED that KaStarCom. World Satellite, LLC will prepare any necessary submissions to the International Telecommunication Union and to affected administrations for the completion of the appropriate coordination and notification obligations for these space stations in accordance with the International Telecommunication Union Radio Regulations. We also remind KaStarCom. World Satellite, LLC that no protection from interference caused by radio stations authorized by other administrations is guaranteed unless coordination procedures are timely completed or, with respect to individual administrations, by successfully completing coordination agreements. Any radio station authorization for which coordination has not been completed may be subject to additional terms and conditions as required to effect coordination of the frequency assignments of other administrations, 47 C.F.R. § 25.111(b).

33. IT IS FURTHER ORDERED that the temporary assignment of any orbital location to KaStarCom. World Satellite, LLC is subject to change by summary order of the Commission on 30 days notice and does not confer any permanent right to use the orbit and spectrum. Neither this authorization nor any right granted by this authorization, shall be transferred, assigned or disposed of in any manner, voluntarily or involuntarily, or by transfer of control of any corporation holding this authorization, to any person except upon application to the Commission and upon a finding by the Commission that the public interest, convenience and necessity will be served thereby.

34. IT IS FURTHER ORDERED that KaStarCom. World Satellite, LLC is afforded 30 days from the date of the release of this Order and Authorization to decline this authorization as conditioned. Failure to respond within that period will constitute formal acceptance of the authorization as conditioned.

35. This Order is issued pursuant to Section 0.261 of the Commission's rules on delegations of authority, 47 C.F.R. § 0.261, and is effective upon release. Petitions for reconsideration under Section 1.106 or applications for review under Section 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within 30 days of the date of public notice of this Order (*see* 47 C.F.R. § 1.4(b)(2)).

FEDERAL COMMUNICATIONS COMMISSION

Donald Abelson
Chief, International Bureau