



PUBLIC NOTICE

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SATELLITE POLICY BRANCH INFORMATION

Satellite Applications Accepted For Filing in the 12.75-13.25 GHz, 13.75-14.5 GHz, 17.3-17.8 GHz and 10.7-12.7 GHz Frequency Bands

The following applications and amendments to pending applications were filed in response to Public Notice, Report No. SPB-141 (released November 2, 1998), ("Ku-Band Cut-off Notice"), which established a cut-off date for filing non-geostationary satellite orbit (NGSO) fixed satellite service (FSS) system applications in the 12.75-13.25, 13.75-14.5, 17.3-17.8 and 10.7-12.7 GHz frequency bands. The cut-off date was established after SkyBridge L.L.C. submitted an application for authority to launch and operate a global network of NGSO satellites in the above frequency bands (see File Nos. 48-SAT-P/LA-97, 89-SAT-AMEND-97, and 130-SAT-AMEND-98) and the Boeing Company and Denali Telecom, LLC, filed applications in response to prior Bureau cut-off notices, portions of which include frequency bands subject to the Ku-Band Cut-Off Notice.

Upon initial review, the Commission has found these applications acceptable for filing. The Commission reserves the right to return the applications, however, if it determines upon further review that they are defective or not in conformance with the Commission's rules, regulations or policies.

The Commission emphasizes that acceptance of these applications for filing should not be construed as evidence of any predisposition on the part of the Commission to the viability of the applications or the international or domestic regulatory changes that may need to be addressed before an application can be granted. In addition, applicants should be aware that because of outstanding Commission proceedings and Government use of certain frequency bands, not all bands proposed by the applicants in this Public Notice will necessarily be available for NGSO FSS use. [See, e.g., Letter from William T. Hatch, Acting Associate Administrator, Office of Spectrum Management, NTIA, to Dale N. Hatfield, Chief, Office of Engineering and Technology, FCC, dated October 29, 1998 (requesting among other things, that the FCC not authorize any NGSO FSS operations in the 17.3-17.7 GHz band); Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range and Amendment of the Commission's Rules to Authorize Subsidiary Terrestrial Use of the 12.2-12.7 GHz Band by Direct Broadcast Satellite Licensees and Their Affiliates, Notice of Proposed Rulemaking, ET Docket No. 98-206, FCC 98-310, (rel. November 24, 1998) ("NGSO/GSO Sharing NPRM").] We also note that coordination with the National Telecommunications and Information Administration (NTIA), which has primary jurisdiction over U.S. Government use of spectrum, must occur with respect to bands shared between Government and non-Government use prior to any grant of the applications. We further note that these applicants may also have to amend their respective applications to conform with the rules and requirements eventually adopted for space and earth stations providing service in these bands, before a license will be granted.

SAT-AMD-19980318-00021 S2317 THE BOEING COMPANY
Amendment

Original File No. 90-SAT-AMEND-98 & associated with Original File No. 179-SAT-P/LA-97(16); IBFS File No. SAT-LOA-19970926-00149.

As noted in the Ku-Band Cut-Off Notice, The Boeing Company filed an application in response to the cut-off notice for applications to be considered in the 2 GHz band. The portion of Boeing's system that involves frequency bands subject to the Ku-Band Cut-Off Notice will be considered with all proposals filed in response to that Notice. The portion of the proposed system involving frequency bands identified in the 2 GHz Band Cut-Off Notice (Report No. SPB-88 (released July 22, 1997) will be considered in a separate proceeding for those frequency bands. (See Public Notice, Report No. SPB-119, (released March 19, 1998)).

At this time, we solicit comment on those portions of this application that involve frequency bands subject to the Ku-Band Cut-Off Notice.

The Boeing Company has filed an application for authority to construct, launch and operate sixteen non-geostationary satellites to provide a communications system for navigation and surveillance, air traffic management and GPS augmentation. Boeing proposes to operate its satellites in medium-Earth orbit at an altitude of 20,181 kilometers. Boeing requests, among other things, 109 MHz of feeder link spectrum in the 14.391-14.500 GHz band for Earth-to-space transmissions and 109 MHz of feeder link spectrum in the 11.591-11.700 GHz band for space-to-Earth transmissions.

SAT-AMD-19980630-00056 S2241 SkyBridge L.L.C.
Amendment

Original File No. 130-SAT-AMEND-98.

For description of amendments to SkyBridge L.L.C.'s pending application, see File No. SAT-AMD-19990108-00004, below.

SAT-AMD-19990108-00001 S2299 DENALI TELECOM, LLC
Amendment

Amendment to Original File No. 160-SAT-P/LA-97(13); IBFS File No. SAT-LOA-19970926-00127.

As noted in the Ku-Band Cut-Off Notice, Denali Telecom filed an application in response to the cut-off notice for applications to be considered in the 40 GHz band. The portion of Denali's system that involves frequency bands subject to the Ku-Band Cut-Off Notice will be considered with all proposals filed in response to that Notice. The portion of the proposed system involving frequency bands identified in the 40 GHz Band Cut-Off Notice (Report No. SPB-89 (released July 22, 1997) will be considered in a separate proceeding for those frequency bands.

At this time, we solicit comment on those portions of this application that involve frequency bands subject to the Ku-Band Cut-Off Notice.

Denali Telecom filed an application in response to the Commission's cut-off for additional space station applications and letters of intent in the 36-51.4 GHz Frequency Band. (See Public Notice No. Report No. SPB-89 (released July 22, 1997)). Denali requests authority to launch and operate thirteen satellites in highly elliptical orbit to provide FSS and Mobile-Satellite Services for domestic, international and foreign communications. In its initial application, Denali requested, among other things, 200 MHz of downlink spectrum for space-to-Earth transmissions in the band 11.7-12.2 GHz in North America and 12.5-12.7 GHz in Europe and Asia. In response to the Commission's Ku-Band Cut-Off Notice, however, Denali amended its application to change some of its spectrum requirements. Specifically, Denali now requests 1000 MHz of spectrum in the 10.7-12.7 GHz band (preferably the band 11.7-12.7 GHz) for space-to-Earth transmissions and 750 MHz for its Earth-to-space transmissions in the 13.75-14.5 GHz band.

SAT-AMD-19990108-00004 S2241 SkyBridge L.L.C.
Amendment

SkyBridge L.L.C. has filed amendments to its pending applications for authority to launch and operate a global network of NGSO satellites. [See Public Notice, Report No. SPB-98 (released August 28, 1997) (accepting for filing the SkyBridge application, as amended by the 1997 Amendment); Public Notice, Report No. SPB-133 (released July 20, 1998) (accepting for filing the 1998 Amendment).] SkyBridge proposes several changes and clarifications to the SkyBridge application, as amended by the 1997 Amendment. SkyBridge, among other things, proposes to change the number of satellites in its system from sixty-four to eighty, revises its link budgets, revises frequency usage requirements and states it requires at least 2 GHz of contiguous spectrum for space-to-Earth transmissions and at least 1.65 GHz for Earth-to-space transmissions. SkyBridge also submitted a series of simulations that SkyBridge claims demonstrates its amended system's ability to meet the relevant provisional power limits adopted at the 1997 World Radiocommunication Conference.

Note: By Public Notice, Report No. SPB-135 (released August 6, 1998), the Commission afforded interested parties a period of thirty days after the filing of SkyBridge's simulations within which to comment on its July 1998 Amendment. Submission of SkyBridge's most recent amendment included these simulations. Because we now request comment on both amendments, including the simulations, today's Notice effectively renders the August 6, 1998 Public Notice moot.

Associated with File No. SAT-AMD-19980630-00056, listed above.

SAT-LOA-19990108-00002 S2362 HUGHES COMMUNICATIONS INC.

Launch and Operating Authority

Hughes Communications Inc. has filed an application for authority to launch and operate a global Ku-band broadband satellite system called HughesLINK (H-LINK). The proposed system consists of twenty-two NGSO satellites, operating in medium-earth orbits at an altitude of 15,000 kilometers. Eight satellites are in an equatorial-plane and fourteen are in two planes inclined at 45 degrees. Hughes requests authority to operate the proposed H-LINK system in one gigahertz of spectrum within the 10.7-12.7 GHz (Region 2) and 10.70-12.75 GHz (Regions 1 and 3) bands for space-to-Earth transmissions and one gigahertz within the 12.75-13.25 GHz, 13.75-14.5 GHz, and 17.3-17.8 GHz (Regions 1 and 3 only) bands for Earth-to-space transmissions. Inter-satellite links are proposed in optical frequency bands. Hughes proposes to offer a wide variety of two-way, broadband services at data rates from 1.54 Mbps up to 155 Mbps, backbone infrastructure and Virtual Private Network.

SAT-LOA-19990108-00003 S2363 HUGHES COMMUNICATIONS INC.

Launch and Operating Authority

Hughes Communications Inc. has filed an application for authority to launch and operate a global Ku-band broadband satellite system called HughesNET (H-Net). The proposed system consists of a seventy NGSO satellite constellation operating at an altitude of 1490 kilometers. The constellation consists of ten planes, with seven satellites each, inclined at 54.5 degrees. Hughes proposes to operate in one gigahertz of spectrum within 10.7-12.7 GHz (Region 2) and 10.70-12.75 GHz (Regions 1 & 3) for space-to-Earth transmissions and one gigahertz within the 12.75-13.25 GHz, 13.75-14.5 GHz, and 17.3-17.8 GHz bands (Regions 1 & 3 only) for Earth-to-space transmissions. Optical inter-satellite link terminals are proposed for inter-operation with other satellites in the H-Net constellation. Hughes proposes to offer Internet access and support to both packet-switched and circuit-switched operation.

SAT-LOA-19990108-00005 S2364 Teledesic, L.L.C.

Launch and Operating Authority

Teledesic L.L.C. has filed an application for authority to construct, launch, and operate a global constellation of NGSO satellites operating in the fixed satellite service. Teledesic's proposed system, to be known as the Ku-Band Supplement (KuBS) system, will be comprised of thirty satellites, in six orbital planes with five satellites each operating at an altitude of approximately 10,320 kilometers. Teledesic requests authority to operate its KuBS satellites in the 12.75-13.25 GHz, 13.75-14.5 GHz, and 17.3-17.8 GHz bands for Earth-to-space transmissions and the 10.7-12.7 GHz bands for its space-to-Earth transmissions. Teledesic also proposes to operate a separate backup tracking, telemetry, and control (TT&C) system in standard C-band frequencies. Teledesic proposes to operate the KuBS constellation primarily as a high-bandwidth supplement to its Teledesic Network system authorized in the Ka-band (20/30GHz). Teledesic proposes to provide fixed satellite service on a primary basis but requests authority to provide mobile-satellite service on an ancillary, non-interference basis.

SAT-LOA-19990108-00006 S2365 THE BOEING COMPANY

Launch and Operating Authority

The Boeing Company has filed an application for authority to launch and operate a global constellation of NGSO satellites operating in the fixed satellite service. The proposed Boeing system consists of a twenty-satellite constellation operating at a medium earth orbit of 20,182 kilometers. The constellation consists of four orbital planes with five satellites per plane, inclined 57 degrees relative to the equator. Boeing requests authority to operate its NGSO FSS system within the 12.75-13.25 GHz and 13.75-14.5 GHz bands for Earth-to-space transmissions and within the 10.7-12.7 GHz band for space-to-Earth transmissions. Specifically, Boeing proposes to use 326 MHz of Earth-to-space service link spectrum and 1000 MHz of space-to-Earth service link spectrum. Boeing also requests 600 MHz of spectrum for Earth-to-space feeder link operations and 1000 MHz for space-to-Earth feeder link operations. Boeing proposes to provide "bandwidth on demand" communication and data services. In addition, Boeing requests a waiver of Section 2.106 of the Commission's rules in order to provide, on a secondary, non-interference basis, ancillary two-way data transmission services to user terminals affixed to mobile platforms.

SAT-LOA-19990108-00007 S2366 VIRTUAL GEOSATELLITE, L.L.C.

Launch and Operating Authority

Virtual Geosatellite, L.L.C. has filed an application for authority to launch and operate a global constellation of NGSO satellites operating in the fixed satellite service. The proposed system, VIRGO, consists of fifteen NGSO satellites operating in highly elliptical orbits operating at an altitude of 27,300 kilometers at apogee. VIRGO proposes to operate with user links in 14.0-14.5 GHz band for its Earth-to-space transmission and in the 11.2-12.7 GHz band for its space-to-Earth transmission. Gateway links are proposed in the 12.75-13.25 GHz, 13.8-14.0 GHz, 17.3-17.8 GHz, and 5.925-6.725 GHz bands for Earth-to-space transmissions and the 10.7-11.2 GHz and 3.7-4.2 GHz bands for space-to-Earth transmissions. Inter-satellite links are proposed in optical frequency bands. VIRGO proposes to provide high speed Internet access and direct-to-home data and video services to small user terminals in most areas of the world.

Comments or petitions regarding these applications may be filed on or before JUNE 9, 1999. Replies and oppositions may be filed on or before JUNE 30, 1999. Responses may be filed on or before JULY 16, 1999.

Ex Parte Status of this Proceeding. The above applications are restricted under the Commission's ex parte rules. See §§ 47 C.F.R. 1.1202(d) and 1.1208. These filings raise complex technical, legal and policy issues, making it essential that the Commission obtain the most current information available, subject to the appropriate procedural safeguards. In order to assist the Commission in developing a complete record on which a well-reasoned decision can be made, the ex parte procedures for these filings are modified. Further, many of the technical and legal issues in the Applications on the one hand, and the Commission's NGSO/GSO Sharing NPRM, which is a "permit but disclose" proceeding, are interrelated. Thus, to reduce possible confusion and ensure that consistent ex parte rules apply in these two proceedings, we redesignate the above applications as "permit but disclose" pursuant to Section 1.1200(a) of the Commission's rules. 47 C.F.R. §§ 1.1200(a), 1.1206 and 1.1208, Note 2. We conclude that such treatment would best serve the public interest. Accordingly, effective today, ex parte presentations in this proceeding are subject to the disclosure requirements set forth in Section 1.1206 of the Commission's rules. 47 C.F.R. § 1.1206.

This action is taken pursuant to authority found in Sections 4(i) and 303 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154 (i) and 303; and pursuant to Sections 0.51, 0.241, 0.261 and 1.1200(a) of the Commission's Rules. See 47 C.F.R. §§ 0.51, 0.241, 0.261 and 1.1200(a).

Copies of the referenced applications and subsequent filings will be available for public inspection in the International Reference Center, Room 102, 2000 M St. N.W., Washington, D.C. and from ITS Duplicating Services at 202-857-3800. For further information, please contact: Kim Baum at (202) 418-0756, Julie Garcia at (202) 418-0763, or Jennifer Gilsenan at (202) 418-0757.