are invited to address whether other licensing approaches should be considered and discuss the relative benefits and disadvantages compared to our proposal.

Steps Taken To Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

23. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.[26]

24. We propose to establish a new Medical Data Service (MEDS) under Part 95 that would encompass all medical devices permitted to operate in the entire 401–406 MHz band. We seek comment on options concerning whether and how the five megahertz of spectrum that would comprise this proposed MEDS band could be divided among the evolving varieties of implanted and body-worn medical transmitters, including low-power, low-duty-cycle (LPLDC) devices without listen-before-talk (LBT).

25. For example, should both implantable and body-worn transmitters be permitted to operate in all, or just selected portions, of the five megahertz of the proposed 401–406 MHz MEDS band? Should the same technical standards that govern the existing MICS center band transmitters be applied uniformly across the entire band? Should an adjustment in the permissible operating power of body-worn transmitters be made to account for difference in body tissue attenuation as compared with implantable devices? Similarly, should LPLDC devices without LBT be permitted to operate throughout the entire five megahertz of the proposed MEDS band or be limited to segments such as the 401–402 MHz and 405–406 wing bands? Why or why not? Commenters should explain the rationale, and corresponding benefits and disadvantages, for whatever approach is recommended. Are there any other factors that should be considered with respect to distinguishing the applicable rules for implantable, body-worn devices, and LPLDC transmitters? Should other types of medical radiocommunication devices be considered for operation in this proposed MEDS band? We especially seek small entity comment on these issues.

E. Federal Rules That May Duplicate, Overlap, or Conflict With the Proposed Rule

26. None.

Initial Paperwork Reduction Analysis

27. The *Notice of Proposed Rule Making* contains proposed new or modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104–13. Public and agency comments are due 60 days after the date of publication in the **Federal Register**. Comments should address: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, we seek specific comment on how we might ''further reduce the information collection burden for small business concerns with fewer than 25 employees.''

Ordering Clauses

28. Pursuant to sections 1, 4(i), 7(a), 301, 303(f), 303(g), 303(r), 307, 316, and 332 of the Communications Act of 1934, as amended, 47 U.S.C. sections 151, 154(i), 157(a), 301, 303(f), 303(g), 303(r), 307, 316, and 332, the *Notice of Proposed Rule Making and Notice of Inquiry, is adopted.*

29. The Biotronik *Request for Extension of Waiver,* is granted until one year from the effective date of final rules adopted in this proceeding.

30. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, *shall send* a copy of the *Notice of Proposed Rule Making and Notice of Inquiry,* including the Initial Regulatory Flexibility Analysis to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects in Parts 2 and 95

Communications equipment, Radio, Reporting and recordkeeping requirements.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

[FR Doc. E6–12500 Filed 8–1–06; 8:45 am]

BILLING CODE 6712–01–P

[26] *See* 5 U.S.C. 603(c).

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 2 and 25

[IB Docket No. 06–123; FCC 06–90]

Establishment of Policies and Service Rules for the Broadcasting-Satellite Service

AGENCY: Federal Communications Commission.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Federal Communications Commission proposes application processing and service rules for the 17/24 GHz Broadcasting Satellite Service (BSS). The Commission proposes and/or seeks comment on a number of issues, including: licensing procedures, posting of performance bonds, milestone schedules, limits on pending applications, annual reporting, license terms, replacement satellites, access to the U.S. market from non-U.S. satellites; public interest obligations, copyright and broadcast carriage, equal employment opportunity, geographic service coverage, and emergency alert system participation; use of internationally allocated spectrum by receiving stations located outside the United States; orbital spacing and antenna performance standards; technical requirements for intra-service sharing; other technical requirements, such as reverse band operations, tracking, telemetry, and command operations, polarization, and full frequency re-use requirements; and technical requirements for inter-service sharing in the 17 and 24 GHz bands.

DATES: Comments are due on or before October 16, 2006 and reply comments are due on or before November 15, 2006. Public and agency comments on the Initial Paperwork Reduction Act of 1995 (IFRA) analysis are due October 2, 2006.

ADDRESSES: You may submit comments, identified by IB Docket No. 06–123, by any of the following methods:

• Federal eRulemaking Portal: *http://www.regulations.gov.* Follow the instructions for submitting comments.

• Federal Communications Commission's Web Site: *http://www.fcc.gov/cgb/ecfs/.* Follow the instructions for submitting comments.

• Mail: Joanne Lucanik, Satellite Division, International Bureau, Federal Communications Commission, 445 Twelfth Street, SW., Rm. 6–A660, Washington, DC 20554.

• People with Disabilities: Contact the FCC to request reasonable accommodations (accessible format documents, sign language interpreters, CART, etc.) by e-mail: *FCC504@fcc.gov* or phone: 202–418–0530 or TTY: 202–418–0432.

For detailed instructions for submitting comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: JoAnn Lucanik (202) 418–0719, Satellite Division, International Bureau, Federal Communications Commission, Washington, DC 20554. For additional information concerning the information collection(s) contained in this document, contact Judith B. Herman at 202–418–0214, or via the Internet at *Judith-B.Herman@fcc.gov.*

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's *Notice of Proposed Rulemaking* (NPRM) in IB Docket No. 06–123, FCC 06–90, adopted June 21, 2006 and released on June 23, 2006. The NRPM was subject to an Erratum, released on July 6, 2006. The full text of the NPRM is available for public inspection and copying during regular business hours at the FCC Reference Information Center, Portals II, 445 12th Street, SW., Room CY–A257, Washington, DC 20554. The document may also be purchased from the Commission's duplicating contractor, Best Copy and Printing, Inc., Portals II, 445 12th Street, SW., Room CY–B402, Washington, DC, 20554, telephone 202–488–5300, facsimile 202–488–5563, or via e-mail *FCC@BCPIWEB.com.*

Pursuant to the Regulatory Flexibility Act, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the proposals considered in the NPRM. The text of the IRFA is set forth in Appendix A of the NPRM. Written public comments are requested on this IRFA. Comments must be filed in accordance with the same filing deadlines for comments on the NPRM, and they should have a separate and distinct heading designating them as responses to the IRFA.

In addition, the Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104–13. Public and agency comments are due October 2, 2006. Comments should address: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, *see* 44 U.S.C. 3506(c)(4), we seek specific comment on how we might ''further reduce the information collection burden for small business concerns with fewer than 25 employees.''

Paperwork Reduction Act Requirements

OMB Control Number: 3060–XXXX.

Title: Service Rules and Policies for the Broadcasting Satellite Service (BSS).

Form No.: Not Applicable.

Type of Review: New collection.

Respondents: Businesses or other for-profit entities.

Number of Respondents: 4 respondents; 24 responses.

Estimated Time Per Response: 10 hours.

Frequency of Response: On occasion and annual reporting requirements.

Estimated Total Annual Burden: 240 hours.

Estimated Total Annual Costs: $12,451,700.00.

Privacy Act Impact Assessment: Not Applicable.

Needs and Uses: The purpose of this new information collection is to address the Paperwork Reduction Act (PRA) requirements proposed in the Commission's Notice of Proposed Rulemaking (FCC 06–90) to establish policies and service rules for the new Broadcasting Satellite Service under IB Docket No. 06–123. In this NPRM, the Commission proposes three new information collection requirements applicable to Broadcasting Satellite Service licensees: (1) Annual reporting requirement on status of space station construction and anticipated launch dates, (2) milestone schedules and (3) performance bonds that are posted within 30 days of the grant of the license.

Without the information collected through the Commission's satellite licensing procedures, we would not be able to determine whether to permit applicants for satellite licenses to provide telecommunications services in the U.S. Therefore, we would be unable to fulfill our statutory responsibilities in accordance with the Communications Act of 1934, as amended; as well as the obligations imposed on parties to the World Trade Organization (WTO) Basic Telecom Agreement.

Summary of Notice of Proposed Rulemaking

1. With the NPRM, the Federal Communications Commission (Commission) proposes application processing and service rules for the 17/24 GHz Broadcasting Satellite Service (BSS). Under the Commission's rules and the International Telecommunication Union (ITU) Region 2 allocation, the allocation for BSS at 17/24 GHz will become effective on April 1, 2007. In the United States, satellites operating in the 17/24 GHz BSS will downlink in the 17.3–17.7 GHz frequency band and uplink in the 24.75–25.25 GHz frequency band.

2. The Commission proposes and/or seeks comment on procedures for processing applications and establishing service rules for operations in the 17/24 GHz BSS. The Commission seeks comment on the appropriate licensing framework for the 17/24 GHz BSS. The Commission proposes and seeks comment on safeguards against speculation, an annual reporting requirement, license terms, replacement satellites, and operation by non-United States-licensed satellites operators in the 17/24 GHz BSS.

3. The Commission also proposes and seeks comment on public interest and other statutory obligations of licensees in the 17/24 GHz BSS. Included among the statutory obligations are equal employment opportunities, geographic service rules, and participation in the emergency alert system.

4. In the *18 GHz Report and Order*, 15 FCC Rcd at 13475, paras. 95–99, the Commission stopped the domestic allocation to the BSS at 17.7 GHz. Although the international allocation for Region 2 BSS in the space-to-Earth direction extends from 17.3–17.8 GHz, the Commission believed that it was important to keep as much spectrum

available to the terrestrial fixed services as possible, for as long as possible, in order to assist in relocating displaced facilities. In making this decision, the Commission took into account the ubiquitous nature of BSS services which we believed would preclude successful coordination with a terrestrial service that was similarly widely deployed, and the amount of terrestrial fixed spectrum being lost as a result of that proceeding. *See also* 16 FCC Rcd 19808, 19822–23, paras. 30–31 (2001).

5. The Commission now has received several applications seeking authority to launch and operate satellites in the 17.3–17.8 GHz band. DIRECTV, Pegasus, EchoStar and Intelsat all propose to operate their satellites in the full 500 MHz of spectrum from 17.3–17.8 GHz. The intent of this proceeding is to establish service rules for use of the 17/24 GHz BSS allocation that becomes effective on April 1, 2007, so that applicants may have sufficient time to design their systems in a manner that will conform to our rules. Recognizing the significant technical challenges posed by the question of BSS/FS band-sharing at 17.7–17.8 GHz, we believe that this goal would be disserved by engaging in the protracted rulemaking process that would inevitably result. Moreover, although 17/24 GHz BSS applicants seek to use the 17.7–17.8 GHz band, none has provided evidence that terrestrial fixed service spectrum relocation requirements are less demanding than predicted. Nor has any applicant provided a convincing argument that coordination of widely deployed terrestrial services with ubiquitously located 17/24 GHz BSS receivers would be readily feasible. For these reasons, we do not find compelling motivation to reexamine the Commission's earlier decision with regard to BSS use of the 17.7–17.8 GHz band in the United States. Therefore, we do not propose to authorize or to protect the reception of BSS (space-to-Earth) transmissions into the United States and its possessions in the 17.7–17.8 GHz band.

6. We recognize however, that U.S. satellite operators may wish to use the 17.7–17.8 GHz band to provide service to receiving earth stations located within Region 2, but outside of the United States. The operation of 17/24 GHz BSS receiving earth stations outside of the United States and its possessions does not present the same coordination difficulties with regard to U.S.-licensed terrestrial fixed service stations, nor would it hinder the re-location of these services in the 18 GHz band. We propose to permit U.S. operators to use the international allocation to the BSS in the 17.7–17.8 GHz band, but to limit use of that allocation to international service only, *i.e.*, to receiving earth stations located outside of the U.S. and its possessions. The Commission seeks comment on this proposal.

7. The Commission seeks comment on other changes to our rules which might be necessary should we allow use of the 17.7–17.8 GHz band to provide non-U.S. BSS service. We are proposing to permit transmissions in the 17.7–17.8 GHz band only to receiving earth stations located outside of the United States and its possessions. However, we recognize that the footprint of satellite beams serving near-by Region 2 countries could illuminate portions of the United States and that U.S. terrestrial service stations may be subject to interference from such space-to-Earth satellite transmissions, particularly at low elevation angles. Historically, the Commission has adopted power flux density (pfd) limits to protect terrestrial service antennas from interference from co-frequency space station transmissions. At present, neither the Commission's rules nor the ITU define any pfd limits for BSS systems operating in the 17.7–17.8 GHz band. Prior to adoption of the *18 GHz Report and Order* in 2002, § 25.208(c) of the Commission's rules imposed pfd limits for the FSS in the entire 17.7–19.7 GHz band and Article 21 of the ITU Radio Regulations imposes the same pfd limits on the FSS operating in the 17.7–19.7 GHz band in order to protect terrestrial stations. We propose to extend these same pfd limits to the BSS service (space-to-Earth) in the 17.7–17.8 GHz band. We seek comment on this proposal, and ask whether these pfd limits are sufficient to protect U.S. terrestrial operations in the band, or whether some other limits should be adopted. We note that these pfd limits were adopted to facilitate sharing between co-primary FS and FSS services. Recognizing that we do not intend to authorize receipt of (space-to-Earth) BSS transmissions in the United States and its possessions in the 17.7–17.8 GHz band, we ask whether more stringent pfd limits might be appropriate, particularly in areas of the U.S. located farther from the borders.

8. We also seek comment on tracking, telemetry and command (TT&C) operations in the 17.7–17.8 GHz band. Section 25.202(g) of our rules requires that TT&C functions for all U.S. domestic satellites be conducted at either or both edges of the allocated band(s). The Commission has previously recognized that TT&C functions for U.S.-licensed satellites are best performed at facilities located within the United States, and that locating such facilities in a foreign country could adversely affect an operator's ability to maintain control of its spacecraft. Accordingly, we ask how best to accommodate TT&C functions for 17/24 GHz BSS satellites seeking to use the 17.7–17.8 GHz band to provide international service.

9. *Orbital Spacing:* To date the applications we have received from DIRECTV, EchoStar, Pegasus, and Intelsat are to operate GSO satellites in the 17/24 GHz band. Because we envision the service as a GSO service, we are not considering rules for NGSO satellite systems in this proceeding. However, we seek comment on the appropriateness of this approach and ask whether we should allow for the possibility of both GSO and NGSO 17/24 GHz BSS systems. If so, we ask commenters to elaborate on how such GSO/NGSO sharing might be effected, and what additional or different rules might be necessary to accommodate both types of systems in the band.

10. *Minimum Antenna Diameter and Performance Standards:* Because of the inverse relationship between antenna diameter and antenna off-axis discrimination performance, the orbital separation scheme will largely determine the minimum antenna diameter that can be accommodated in the 17/24 GHz BSS band. As the receiving antenna diameter decreases, greater orbital separation is required to compensate for the increase in off-axis interference received from neighboring satellites. However, because antenna off-axis discrimination performance for a given size antenna improves at shorter received-signal wavelengths, comparably-sized 17/24 GHz BSS-band receive-antennas may be able to deliver a quality of service comparable to 12 GHz DBS-band systems, while operating with satellites at smaller orbital separations.

11. Historically, the Commission has opted not to regulate explicitly the diameter or other technical characteristics of receive-only antennas. Rather, the Commission has typically chosen to establish limits on other system characteristics such as power flux density (pfd) levels or orbital spacing and has left the choice of receive-antenna characteristics to the operator with the understanding that receiver size has a bearing on availability, quality of service and the ability to market the service to consumers; however, the operator must then accept any resulting interference from other systems that are operating within the permitted levels. We believe

that this approach has afforded operators maximum technical flexibility, especially considering that earth station receive antenna size is a very important factor to potential consumers of DTH service. However, the Commission also seeks to ensure that U.S.-licensed BSS systems receive sufficient interference protection and that subscribers' receive antennas will work effectively in current and future radio frequency interference environments. In particular, the receive earth station antenna off-axis discrimination performance will affect the amount of interference into BSS receivers from other systems. We note that, in implementing its two-degree spacing policy with respect to the FSS, the Commission has adopted certain earth station antenna performance requirements (*see, e.g.*, 47 CFR 25.209). Accordingly, we request comment on whether the Commission should afford interference protection to 17/24 GHz BSS systems only to the extent that they meet certain receive antenna performance standards. Specifically, we request comment on what type of regulation might be appropriate, such as adopting side-lobe suppression or minimum gain requirements, or some other parameter.

12. *Uplink Power Levels:* In order to implement the two-degree spacing policy for C- and Ku-band FSS satellites, the Commission established rules that define uplink power density limits and antenna performance standards. *See* 47 CFR 25.134, 25.208, 25.209. In combination, these power density limits and antenna performance standards ensure that conforming FSS satellite systems will not emit power at off-axis angles at levels high enough to cause unacceptable interference to adjacent co-frequency satellites spaced at two-degree intervals. Similarly, in the Ka-band the Commission adopted a two-degree blanket licensing requirement that included uplink off-axis equivalent isotropically radiated power (e.i.r.p.) density limits and a single-entry power flux density (pfd) limit in the downlink. *See* 47 CFR 25.138. Successful implementation of any orbital spacing regime for the 17/24 GHz BSS service will likely require that the Commission develop analogous criteria. However, we recognize that in the 17/24 GHz BSS band the choice of orbital spacing will be determined in large measure by the operator's desire to serve its customers with a certain size of receiving antenna, and that 17/24 GHz BSS satellites may operate in an orbital spacing environment with greater than two-degrees of separation. Moreover, we recognize that feeder link earth stations typically operate with large diameter antennas that exhibit good off-axis rejection properties. For these reasons, the problem of off-axis interference into adjacent satellites may not be as significant in the 17/24 GHz band as it is in the FSS bands. Accordingly, we seek comment on our assumption regarding the need to establish off-axis uplink power limits for this service. In addition, the Commission's rules provide for routine licensing of FSS earth stations in situations where (in combination with the antenna performance standards of § 25.209) specific minimum equivalent antenna diameters and maximum uplink power limits are met. *See* 47 CFR 25.211(d) and 25.212(c)–(d). We seek comment on whether analogous criteria might be developed for expedited licensing of feeder link earth stations in the 24 GHz band, and if so, what equivalent antenna diameters and power limits, or other technical characteristics might be appropriate.

13. We recognize that absent a clearly defined orbital separation, the interference contribution resulting from uplink transmissions to adjacent satellites cannot be fully determined. However, we seek comment on whether the proposed clear-sky earth station antenna off-axis e.i.r.p. density values might be appropriate down to some minimum orbital separation value, and whether they would provide sufficient protection to adjacent GSO BSS satellites. We have chosen to propose accommodating the highest power level proposed by an applicant, but we seek comment on whether some mid-range or other value might be preferable, or whether a higher level might be better to allow for future higher-power systems. We seek further comment on whether there are other factors that should be considered when determining an off-axis e.i.r.p. density value, such as the potential for interference to/from other services sharing the band, including 24 GHz FS systems, or the radiolocation service. We also ask what form an uplink power density rule should take, whether it is most appropriate to specify some input power or power density level in combination with the antenna performance requirements of § 25.209, or to specify a composite curve of off-axis e.i.r.p. density levels as is done for blanket licensing of Ka-band GSO FSS earth stations. *See* 47 CFR 25.138(a).

14. We anticipate that some future systems may wish to operate at higher e.i.r.p. density values than those proposed at this time. Our current FSS service rules provide a mechanism for licensing such non-conforming systems. *See* 47 CFR 25.220 and 25.138(b), (c). These rules place the burden on the applicant to provide a technical showing to the Commission, and to coordinate its non-conforming operations with adjacent operators. We propose to adopt a similar approach to accommodate satellite systems in the 17/24 GHz BSS band wishing to uplink with higher power levels. We seek comment on this issue and ask whether this approach is appropriate or whether different rules should be adopted. Non-conforming FSS operators are required to coordinate with adjacent satellites at 2°, 4° and 6° away. *See* 47 CFR 25.220 and 25.138(c). Recognizing that 17/24 GHz BSS satellites may not be operating in a two-degree spacing environment, we seek comment on the angular distance over which coordination should be required.

15. The uplink off-axis e.i.r.p. density limits discussed above are for clear-sky operations only. GSO satellites operating in the 24 GHz band can suffer significant signal attenuation in the presence of precipitation and may likely need to transmit at higher powers during such weather conditions in order to overcome the effects of rain fade. Applicants have indicated a need to employ uplink adaptive power control to provide transmit power levels sufficient to meet the desired link performance during unfavorable weather events, while simultaneously ensuring that threshold power levels are not excessive at other times. In the *28 GHz First Report and Order,* we recognized that uplink power control limits would facilitate operations in the 27.5–30.0 GHz band, and we amended § 25.204 of our rules to require that all Ka-band FSS earth stations employ adaptive uplink power control or other methods of fade compensation. In the *18 GHz Report and Order,* we adopted rules for Ka-band FSS earth stations employing uplink power control which limit transmissions during conditions of uplink fading to 20 dB above those permitted under clear-sky conditions. *See* 47 CFR 25.138(a)(5). We seek comment on whether it is necessary to adopt a rule requiring 17/24 GHz BSS feeder link earth stations to employ uplink power control, similar to the FSS requirement of § 25.204. We also seek comment on what values or conditions might be applied to the use of 17/24 GHz BSS uplink adaptive power control, including: a minimum signal attenuation required before uplink transmit power may be increased; an upper limit on permissible transmit power increase; an accuracy

requirement over the range of path attenuations; or other possible parameters such as the control-loop response time or limits on system overshoot.

16. *Downlink Power Limits:* The downlink power levels transmitted by adjacent co-frequency satellites, in combination with the sidelobe performance characteristics of the receiving earth station antenna, will determine the carrier-to-interference ratio that an operator experiences at the receive antenna as a result of adjacent satellite interference. At present, neither the Commission nor the ITU have established power flux density requirements or other downlink power limits for BSS systems operating in the 17.3–17.7 GHz band. Article 21 of the ITU Radio Regulations does define pfd limits for the FSS in the 17.7–17.8 GHz band in its Table 21–4.

17. In other frequency bands, the Commission has frequently adopted downlink power limits for space stations transmissions in order to facilitate both inter-service and intra-service sharing. For example, our rules define power flux density limits in the 4/6 GHz and 20/30 GHz FSS bands in § 25.208, and impose additional pfd requirements for blanket licensing of Ka-band earth stations in § 25.137(a)(6). However, in other bands, no downlink power limits exist. We note that one advantage of imposing a downlink power limit is to establish a relatively homogeneous transmitting environment, and to ensure that established receiving antennas are not subject to unforeseen levels of adjacent satellite interference, particularly as newer generation satellites are brought into service. Moreover, application of downlink power limits may also influence the ability of 17/24 GHz BSS systems to operate in the vicinity of co-frequency receiving DBS satellites. However, adopting such limits can to some extent restrict the ability of future satellites to increase their power levels in response to improvements in technology, or to compensate for interference from other sources (e.g., foreign satellites or adjacent-band radars).

18. A review of the 17/24 GHz BSS filings submitted to the Commission, indicates that applicants plan to operate digital systems with downlink maximum e.i.r.p. levels that range between 58.6 dBW and 64.7 dBW. It appears that worst case pfd levels are less than -117 dBW/MHz/m^2 for all systems, with the exception of certain Intelsat spot beams that may have maximum saturated pfd levels of -115 dBW/MHz/m^2 at the Earth's surface. Accordingly, we seek comment on whether the Commission should adopt pfd or other downlink power level values in the 17.3–17.7 GHz band. We ask what level of downlink power would be appropriate, and in particular whether the ITU's FSS pfd limits, with an upper limit of -115 dBW/MHz/m^2, should be applied in the 17.3–17.7 GHz band. We ask whether a different, perhaps higher power level is preferable in order to provide for future generation satellites, or to compensate for anticipated interference sources. The present operating downlink transmitted power levels proposed by applicants assume an orbital spacing environment of either 4-degrees or 4.5-degrees. We seek comment on what pfd limit would be preferable if the Commission were to establish an orbital spacing regime different from either 4-degrees or 4.5-degrees.

19. *Reverse Band Operations:* When the Region 2 BSS allocation at 17.3–17.8 GHz becomes effective in 2007, it will be shared with the current 17.3–17.8 GHz DBS feeder-link allocation in the Earth-to-space direction. This operating scenario, in which the same frequency band is used for both Earth-to-space and space-to-Earth transmissions, is known as ''reverse band'' and results in additional interference paths which are different from those found in a conventional GSO satellite sharing situation. In the typical GSO satellite sharing scenario, interference paths occur between the earth stations of one system and the satellites of another, and vice versa. In such cases, co-frequency sharing is facilitated primarily through antenna off-axis discrimination at each end of the interference path, in combination with limits on spatial proximity (orbital separation) and transmission power. The reverse-band sharing scenario is different in that two new and distinct interference paths occur: (1) Between the earth stations of different systems; and (2) between the space stations of different systems. In effect, reverse-band operations create two additional interference paths: An earth station-into-earth station path (ground path), and a space station-into-space station path (space path).

20. *Ground Path Interference:* Ground path interference (here, the terms ''DBS'' or ''DBS earth station'' refer to earth stations that are DBS feeder links) will occur when the signals from transmitting DBS feeder-link earth stations operating in the 17.3–17.7 GHz band are detected at the receiving earth stations of 17/24 GHz BSS subscribers. This interference situation will be the most severe in areas surrounding the DBS feeder uplink stations. In addition, 17/24 GHz BSS operators who choose to co-locate their TT&C earth stations with DBS TT&C earth stations systems may experience difficulty in receiving the downlinked telemetry signal from the 17/24 GHz BSS spacecraft.

21. At present there are a relatively small number of DBS feeder-link earth stations. If the current situation were to remain unchanged, the ground path interference problem into 17/24 GHz BSS subscriber antennas might not pose a significant problem. However, we recognize that local programming is being uplinked from a growing number of metropolitan areas. We must anticipate that DBS feeder-link earth stations that transmit in the Earth-to-space direction may become increasingly common in populated areas, thereby escalating the potential for interference into 17/24 GHz BSS subscriber antennas. In addition, future entrants such as short-spaced DBS systems, or non-U.S. DBS satellites serving the U.S. market, could result in the deployment of an even greater number of feeder-link earth stations at multiple sites within the United States. The interference problem may be further exacerbated by the proliferation of small-diameter 17/24 GHz BSS subscriber receiving antennas with relatively poor off-axis discrimination properties.

22. There is no procedure established in the Commission's rules regarding coordination of co-frequency, DBS feeder-link satellite earth stations with BSS subscriber terminals. Instead, we note that Appendix 7 of the ITU Radio Regulations describes a procedure for determining the coordination area for an earth station transmitting in a frequency band allocated to space services in both Earth-to-space and space-to-Earth directions. In other sharing situations, the Commission has successfully relied upon the ITU Appendix 7 coordination methodologies to effect coordination between the co-frequency earth stations of different services. Specifically, § 25.203 in combination with § 25.251 of our rules define a mechanism for coordination between terrestrial microwave stations and satellite earth stations that share frequency bands with equal rights. This mechanism is based upon the procedures set forth in Appendix 7 of the ITU Radio Regulations. Similarly, in the case of coordination between co-frequency reverse-band DBS feeder-link and BSS receiving earth stations operating in the 17.3–17.7 GHz band, we propose to make use of the coordination methodology defined in Annex 3 of Appendix 7 of the ITU Radio Regulations. We seek comment on this proposal and ask whether this

coordination methodology may be appropriately applied in this situation.

23. We also seek comment on the types of technical information DBS feeder-link earth station operators should make available to 17/24 GHz BSS operators for the purposes of earth station coordination.

24. In addition, we envision that both the DBS feeder links and 17/24 GHz BSS services will be deploying new earth stations over time, so that new stations of one service will continually be established among existing stations from the other. The Commission wants to ensure that U.S.-licensed 17/24 GHz BSS systems receive sufficient interference protection and that subscribers' receive antennas will work effectively in both current and future radio frequency interference environments. However, we are also committed to preserving the prospect for growth and expansion of the DBS service, and to providing for future DBS market entrants. Therefore, we seek to adopt service rules that achieve an appropriate balance between accommodating both present and future DBS feeder-link operations and ensuring protection of 17/24 GHz BBS receiving systems from interference.

25. In the *MVDDS Second R&O,* 17 FCC Rcd 9614 (2002), the Commission addressed a frequency sharing situation that presented ground path interference issues and temporal build-out of interspersed earth stations, similar to those we envision resulting from reverse band satellite operations in the 17.3–17.7 GHz band. In the 12 GHz band, two co-primary, co-frequency services sought to operate in a sharing scenario where ubiquitous and ongoing deployment of stations from both services was anticipated. The Commission recognized that the incumbent DBS receive-only antennas were subject to interference from the introduction of transmitting MVDDS stations. In the *MVDDS Second R&O,* the Commission concluded that careful MVDDS system design and the use of various mitigation techniques could achieve successful sharing of the 12 GHz frequency band by both services. To accomplish this goal, the Commission adopted *inter alia* a coordination procedure that requires that an MVDDS operator entering a market where DBS receivers are already established must satisfy certain requirements in order to protect these customers. 47 CFR 101.1440(d). In addition, a mechanism is established for information exchange between the operators of both services, in particular to take into account recently acquired DBS customers. (*see* 17 FCC Rcd at 9652, para. 88) Once the time period prescribed for this information exchange has passed, any new DBS receive antennas must be installed in a manner to avoid interference from the MVDDS signal. These later-installed DBS earth stations have no right of complaint against the notified MVDDS transmitting antenna.

26. We seek comment on whether we should adopt a similar approach to sharing between DBS feeder-link earth stations and 17/24 GHz BSS receiving earth stations. Under such an approach, DBS operators planning new feeder-link earth stations would be required to provide the technical information discussed above to 17/24 GHz BSS licensees, at least 90 days prior to commencing operations of the new DBS feeder-link earth station. Within 30 days after receipt of the new DBS feeder-link earth station technical information, the 17/24 GHz BSS licensees would be required to provide the DBS feeder-link earth station operator with a list of potentially-affected 17/24 GHz BSS customer locations within the coordination area described above. Before beginning operations, the new DBS feeder-link earth station operator would be required to take into account these 17/24 GHz BSS customers and to ensure that its operations do not cause them harmful interference. Once the 30-day time period prescribed for this information exchange has passed, any new 17/24 GHz BSS receiving earth stations would be required to accept or mitigate any interference from the DBS feeder-link transmissions. These later-installed 17/24 GHz BSS receiving earth stations would have no right of complaint against the new DBS feeder-link transmitting earth station. We seek comment on this proposal. We recognize that there may be reluctance on the part of 17/24 GHz BSS operators to reveal their customer data, particularly to another DBS or BSS operator, and we seek comment on alternate approaches to coordinating DBS feeder-link and 17/24 GHz BSS earth station operations. We also ask whether some different approach would better facilitate sharing in the 17/24 GHz band.

27. In the *MVDDS Second R&O,* the Commission took additional steps to ensure successful sharing in the 12 GHz band and adopted various equivalent power flux density (epfd) and power density limits for MVDDS systems, as well as rules governing their application. *See MVDDS Second R&O,* 17 FCC Rcd at 9641–9642, para. 68. The Commission's existing rules do not specify transmitting epfd or of-axis e.i.r.p. density limits for DBS feeder-link earth stations, except in the band 17.7–17.8 GHz, which is shared co-equally with terrestrial services. Interference into 17/24 GHz BSS receivers could be reduced if the e.i.r.p. levels emitted towards the horizon by DBS feeder link antennas were minimized. Limiting DBS feeder link off-axis transmit power levels may facilitate co-existence of 17/24 GHz BSS subscriber earth stations and DBS feeder link earth stations, while decreasing the coordination burden on both services. Accordingly, we ask whether off-axis e.i.r.p. density or other transmitting power limits should be applied to DBS feeder-link bands in order to protect 17/24 GHz BSS receiving earth stations from interference.

28. Section 25.204(b) of the Commission's rules places limits on earth station e.i.r.p. in bands above 15 GHz shared coequally with terrestrial radiocommunication services, in order to facilitate sharing with these services. This rule was not intended to facilitate sharing among DBS and BSS earth stations, and it is applicable to DBS feeder link earth stations only in the band segment 17.7–17.8 GHz that is shared with terrestrial services. We seek comment on whether the Commission should extend this requirement to DBS feeder link earth stations operating in the entire 17.3–17.8 GHz band or adopt some other, more stringent off-axis e.i.r.p. requirement. We also seek comment on whether a different approach, such as requiring DBS feeder link antenna shielding, would be more appropriate. Similarly, we request comment on whether the Commission should afford interference protection to 17/24 GHz BSS systems only to the extent that they meet certain receive antenna performance standards. Specifically, we request comment on what type of regulation, if any, would be appropriate, such as adopting antenna off-axis discrimination requirements or minimum gain requirements. We seek comment on whether the e.i.r.p density limits of § 25.204 (b)–(e) would be sufficient to protect 17/24 GHz BSS earth stations if applied to the 17.3–17.7 GHz band, or whether some other limits would be more appropriate. We seek comment on whether it is necessary to adopt another approach, such as stipulating epfd limits, in order to facilitate coordination between DBS feeder-link earth stations and 17/24 GHz subscriber receivers, and if so, which methodology should be used in determining such limits. We also seek comment on whether we should impose any additional requirements on either DBS feeder-link earth station operators

or on 17/24 GHz BSS operators in order to mitigate interference into 17/24 GHz BSS subscriber receiving antennas.

29. *Ground Path Interference Into BSS Telemetry Earth Stations:* Ground path interference may also occur between transmitting DBS feeder-links and the receiving TT&C stations of 17/24 GHz BSS systems that choose to co-locate their TT&C earth stations at existing DBS feeder-link earth station sites. Choice of facility site is a system design parameter that is under the control of the operator, and does not necessarily require a Commission action to remedy. Accordingly, we seek comment on whether the Commission should adopt requirements to guard against such interference scenarios.

30. We propose to require earth station applicants planning to co-locate their 17/24 GHz BSS TT&C stations with DBS feeder-links earth stations to make a technical showing to the Commission demonstrating their ability to maintain sufficient margin in their telemetry links in the presence of the interfering DBS signal. Additionally, we propose to require DBS feeder link earth station applicants planning to co-locate with their 17/24 GHz BSS telemetry earth stations to make a similar technical showing to the Commission. We seek comment on this proposal and ask what parameters would be appropriate in such a showing. In addition, we seek comment on other interference measures we might consider such as mandating a level of equipment performance (*e.g.*, filter rejection).

31. *Increased Flexibility of Spectrum:* Footnote NG 167 of the Domestic Table of Frequency Allocations (*see* 15 FCC Rcd 7207 (1999)) limits use of the FSS allocation (Earth-to-space) in the 24.75–25.25 GHz band to use by feeder links for the BSS operating in the band 17.3–17.7 GHz. In the *18 GHz Report & Order,* we noted that, although we were allocating 500 megahertz for BSS feeder links at 24.75–25.25 GHz for 400 megahertz of BSS uplinks at 17.3–17.7 GHz, we declined to reduce the amount of spectrum available for feeder links for the BSS. We stated that the flexibility that this additional 100 MHz of feeder link spectrum afforded might prove useful to 17/24 GHz BSS operators in some situations including occasional difficulties that might be encountered during coordination. The ability to use spectrum in the 24 GHz band for feeder-links operating with other BSS services, such as DBS, might afford operators increased flexibility in system design and spectrum use. Providing this increased flexibility might also assist operators in designing their systems so as to avoid ground path interference problems associated with reverse band operations in the 17.3–17.8 GHz band. The benefit of alternative feeder link spectrum might be particularly useful in situations where DBS feeder-link earth stations must be located in populated areas with a high density of 17/24 GHz BSS receiving antennas, or when 17/24 GHz BSS telemetry receiving facilities are close by. We propose to modify footnote NG167 of the Domestic Table of Frequency Allocations in order to permit use of the 24.75–25.25 GHz FSS allocation (Earth-to-space) by feeder links operating with the BSS in frequency bands other than 17 GHz, *e.g.*, the 12 GHz DBS band. We seek comment on this proposal.

32. The 24.75–25.05 GHz band is shared on a co-primary basis with the radionavigation service and the 25.05–25.25 GHz band is similarly shared on a co-primary basis with the fixed service. Permitting migration of BSS feeder link operations from other bands (such as 17.3–17.7 GHz) into the 24 GHz band could place an increased burden on these two services, and may hinder their ability to operate or to deploy additional stations. General requirements for sharing with the radionavigation service and the fixed service in the 24 GHz band are discussed in paragraphs 91–93 of the *NPRM.* However, we seek specific comment on any impact to these other co-primary services from our proposal to permit more flexible use of the 24 GHz band by BSS feeder links. In the *18 GHz Report & Order,* we noted our belief that the feasibility of the sharing between these 17/24 GHz BSS feeder links and the fixed service at 24 GHz is based in part on the limited number of expected 17/24 GHz BSS feeder links. We ask whether these additional feeder link operations can be accommodated in the 24.75–25.25 GHz band, or whether they will unduly restrict operation and deployment of either new radionavigation or fixed service systems. We ask whether our existing FSS/FS coordination procedures set forth in § 25.203 of the Commission's rules are sufficient to facilitate co-existence of additional BSS feeder link earth stations with the 24 GHz Fixed Service, or whether some additional requirement(s) should be imposed.

33. *Space Path Interference:* Space path interference will occur when the signals from transmitting 17/24 GHz BSS satellites are detected by the receiving antennas of DBS satellites. The amount of interference received by the victim DBS satellite will depend on the specific orientation between the transmitting and receiving satellites, the extent of physical separation, the transmit power (e.i.r.p.) levels, and the off-axis gain discriminations of both transmitting and receiving antennas on the adjacent satellites. The problem is expected to be particularly problematic when satellites are nominally co-located, *i.e.*, a receiving DBS satellite is located at the same nominal GSO orbital longitude as a transmitting 17/24 GHz BSS satellite.

34. Recognizing the significant difficulties in preventing harmful interference in the case of co-clustered satellites, we ask whether transmitting 17/24 GHz BSS satellites should be precluded from locating in the same cluster with receiving *co-frequency* DBS satellites. We seek comment on this issue. We also ask whether co-clustering of 17/24 GHz BSS and receiving *co-frequency* DBS satellites might be possible in instances where both spacecraft are controlled by the same operator. However, we also seek comment on methods we might employ to facilitate co-location, or co-clustering of DBS and 17/24 GHz BSS satellites.

35. We seek further comment on the feasibility in general of locating transmitting 17/24 GHz BSS satellites at close distances (i.e., within the same cluster, or at nearby adjacent locations) as receiving DBS satellites operating with 17 GHz feeder-links. We ask whether there is a minimum separation distance that we should mandate for the two co-frequency satellites, and if so, what that separation distance should be. We also ask whether we should impose an off-axis antenna discrimination requirement on satellites in the 17/24 GHz BSS service, the DBS service, or both, and if so what the requirement(s) should be. We ask whether we should impose either an absolute e.i.r.p. limit on transmitting BSS satellites, and if so, what that value might be, or whether an e.i.r.p. mask might be more appropriate. If the latter, we seek comment on the angular range over which such a mask should be applied, and what power limits would be most appropriate at different angular values. Finally, we seek comment on whether there are any other requirements we should consider in order to prevent reverse-band adjacent satellite interference in the 17 GHz band. Specifically, we ask applicants how they plan to address the problem of space path interference with the co-located satellites they have proposed.

36. Space path interference from transmitting 17/24 GHz BSS satellites has the potential to cause loss of the telecommand signal at the receiving DBS satellite. As in the ground path telemetry case, we are aware that interference into TT&C systems can

present a serious problem due to the potential loss of satellite control, and we seek comment on what requirements the Commission should adopt to guard against such interference scenarios. As in the ground path case, we propose to require space station applicants planning to co-locate their 17/24 GHz BSS space stations within cluster locations occupied by DBS space stations to make a technical showing to the Commission demonstrating their ability to sufficiently minimize interference into nearby DBS systems, such that adequate margin is maintained in the DBS telecommand links in the presence of the interfering BSS signal. Similarly, we will ask DBS operators planning to locate their satellites at an orbital location already occupied by a transmitting 17/24 GHz BSS satellite to make a technical showing to the Commission demonstrating how they plan to maintain sufficient margin in their telecommand links in the presence of the interfering BSS signal. We seek comment on this proposal and ask what parameters would be appropriate in such a showing.

37. *Other Technical Requirements:* We note that tracking, telemetry, and command (TT&C) issues have been raised in some of the 17/24 GHz applications filed with the Commission, and below, seek comment on need to establish requirements for these activities. Also, we seek comment on the need for polarization and frequency re-use requirements. In addition to these issues, we invite parties to comment on other technical matters that the Commission should address in this rulemaking, and seek comment on any further changes to our rules that should be adopted for 17/24 GHz BSS systems.

38. *Technical Requirements for Inter-Service Operations*—Sharing in the 24 GHz Band: In 1997, the Commission modified the Domestic Table of Frequency Allocations to provide a primary allocation in the frequency band 25.05–25.25 GHz to support the 24 GHz Fixed Service, formerly known as the Digital Electronic Messaging Service (DEMS) (See, 15 FCC Rcd 3471 (1997)). The band is now allocated on a co-primary basis to both the FS and to the FSS (Earth-to-space). Several 24 GHz FS systems have already been licensed and we must therefore consider the likelihood that additional systems will be deployed in the future. The potential exists for 17/24 GHz BSS feeder-link earth stations operating in the 25.05–25.25 GHz band to interfere with existing and future 24 GHz FS hub and user stations that operate in the same frequency band. When we adopted this shared allocation at 24 GHz, we stressed that while the full extent of the interference was unknown at that time, our belief in the feasibility of sharing was based on limitations on the number of expected 17/24 GHz BSS feeder link facilities and on the fact that potential interference to the 24 GHz service would be limited to hub stations. It was noted that the rules relevant to the 24 GHz service are subject to the outcome of the 24 GHz service rules proceeding. (*See* 15 FCC Rcd at 13479, para. 105). We noted that the successful implementation of this allocation would require the development of sharing criteria that will be considered in a future rulemaking. In light of the proposed expansion in this band for 12 GHz BSS feeder links in the *NPRM* and the nature of the 24 GHz service, we seek to develop sharing criteria that would assure successful implementation of BSS feeder links and the 24 GHz service and request comment on what these criteria should be. Accordingly, we request comment on the feasibility of operating BSS feeder-links in this band on a co-frequency basis with 24 GHz FS systems and whether existing power levels and coordination procedures are sufficient given that 24 GHz FS systems have been licensed by geographic area and are not required to file site specific data.

39. In Region 2, the International Table of Frequency Allocations provides only the FSS with primary status in the frequency band 24.75–25.05 GHz. In the Domestic Table of frequency allocations however, primary status is shared by both the FSS and the radionavigation service. (*See* 47 CFR 2.106). At this time we are aware of no operational radionavigation systems in the band. However, it is not inconceivable that future radionavigation systems might be deployed. Furthermore, we are aware of no specific sharing criteria or rules governing co-frequency operation of FSS and radionavigation systems. We seek comment on the feasibility of operating BSS feeder-links (Earth-to-space) in this band on a co-primary basis with potential future radionavigation systems. We seek comment on what are the most likely interference scenarios, and ask what measures might best provide for future operation of both services. We ask whether any changes to our rules such as power limits, coordination requirements, or antenna performance requirements might be considered in order to minimize inter-service interference in the 24.75–25.05 GHz band. We seek comment on technical or operational measures that might be adopted by either satellite system operators or by radionavigation system operators in order to facilitate co-frequency operation of these two services.

40. *Sharing in the 17GHz Band:* In the Domestic table of Frequency Allocations, the Radiolocation Service is allocated use of the 15.7–17.3 GHz band on a primary basis for U.S. Government systems. (*See* 47 CFR 2.106). Military services are the largest users of the band and have a considerable investment in radiolocation operations in this frequency range, which include a large number of radar systems that perform ground-mapping, terrain-following maritime and target-identification functions. Numerous high-powered synthetic aperture radars (SARs) operate near the band edge adjacent to 17.3 GHz. At present, these SARs are largely airborne, and are employed primarily for ground mapping and detection of airborne objects. The National Telecommunications and Information Administration (NTIA) has stated that future radar systems are likely to resemble existing radars, including the capability to operate differently in different azimuth and elevation sectors, and that future designs may seek to operate in a wide band extending to the edge of the authorized allocation. Future radar systems will likely employ electronically-steerable antennas, and the NTIA maintains that the introduction of newer phase-steered radars could facilitate electromagnetic compatibility in some circumstances. In addition, newer radar systems are expected to have average-power capabilities at least as high as those of current systems, although the NTIA expects that future designs will strive to reduce wideband noise emissions through the use of solid-state transmitter/antenna systems. These would employ longer pulse transmissions with substantially higher duty cycles, but probably at lower peak power levels, as compared to tube-type radar transmitters.

41. The NTIA has provided the Commission with information concerning technical and operating characteristics of certain adjacent-band radiolocation systems that it considers likely to impact 17/24 GHz BSS receiving earth stations and sufficient for general calculations to asses the compatibility between these radars and BSS systems. The technical characteristics of the radiolocation systems operating in the 15.7–17.3 GHz band are provided in Appendix C of the NRPM. The NTIA has also identified two interference coupling scenarios that it believes are likely to exist between radiolocation systems and BSS receiving

antennas in the 17 GHz band: earth station receiver front-end overload and out-of-band interference from high-power pulsed emissions. With regard to adjacent band interference due to high power pulsed emissions, the NTIA cites measurements that it performed on a 4 GHz digital earth station receiver that employed error correction signal processing. However, as the NTIA also notes, the applicability of these results to 17 GHz systems requires further study. Accordingly, we seek comment on the interference scenarios that are most likely to be encountered between adjacent-band radiolocation systems and BSS receiving antennas, and on the general applicability of the NTIA's findings. Specifically, we ask what differences in 17/24 GHz BSS receiver design and signal processing should be taken into account when assessing interference from adjacent-band radiolocation systems. We also ask 17/24 GHz BSS operators for comment on their systems' sensitivity to unwanted adjacent-band emissions, and on the level of protection they may require. We also seek comment on what measures 17/24 GHz BSS operators might adopt in order to mitigate such interference.

42. The Commission's rules do not establish unwanted emission limits for radiolocation systems operating in the 15.7–17.3 GHz band. Appendix 3 of the ITU Radio Regulations defines limits for an attenuation value used to calculate maximum permitted power levels of unwanted emissions in the spurious domain in Table II of § II. For the Radiolocation Service this attenuation below the radiated emission power level is defined as $43 + 10\text{Log}_{10}(\text{PEP})$, where PEP is the peak envelope power in watts. We seek comment on the suitability of this value to protect 17/24 GHz BSS receivers from interference caused by unwanted emissions from adjacent-band radars.

43. In addition, the band 17.3–17.7 GHz is allocated on a secondary basis to the Radiolocation Service for use by Federal Government systems. Numerous types of radiolocation stations have been operated in this band, including ship, ground and airborne equipment. There may be future radiolocations systems that seek to operate in this spectrum on a secondary basis, and the potential for interference into 17/24 GHz BSS subscriber receiving antennas exists. We intend to ensure that 17/24 GHz BSS receivers are adequately protected. However, the Commission is also committed to encouraging efficient use of spectrum whenever possible. Accordingly, we seek comment on approaches we might adopt to accommodate future secondary radiolocation operations in this band. We ask what types of interference scenarios may be anticipated and what criteria might be adopted to ensure protection of BSS systems while allowing for future secondary operation of radiolocation systems in the 17.3–17.7 GHz band. We also ask 17/24 GHz BSS operators to address the level of protection required for their receiving earth stations and whether 17/24 GHz BSS and secondary radiolocation services could co-exist if appropriate protection criteria were in place. Finally, we note that Footnote US259 to the United States Table of Frequency Allocations requires that stations in the radiolocation service in the 17.3–17.7 GHz band be restricted to operating powers of less than 51 dBW e.i.r.p. after feeder-link stations for the broadcasting-satellite service are authorized and brought into use. (*See* 47 CFR 2.106, footnote US259). This requirement was developed to protect GSO satellites operating with feeder-link transmissions defined by the Region 2 planned bands, and was not designed with protection of small-diameter 17/24 GHz BSS receiving earth stations in mind. Nonetheless, we seek comment on whether this restriction is adequate to protect 17/24 GHz BSS subscriber earth stations from harmful interference caused by transmitting radiolocation systems.

44. The allocation to the radiolocation service is secondary relative to the BSS in the 17.3–17.7 GHz band. Accordingly, secondary radiolocation stations are precluded from causing harmful interference to the stations of a primary service such as the 17/24 GHz BSS. (*See* 47 CFR 2.105(c)(2)(i)). However, we recognize that Federal radiolocation systems are now operating in this band and have been in operation for some time. Further, in its March 29, 2000 letter to the Commission, NTIA stated that radiolocation systems continuing to operate in the 17.3–17.7 GHz band after April 1, 2007 may have to be accommodated, notwithstanding their allocation status with respect to BSS stations. Recently, NTIA again noted that it anticipates continued operation of Federal radiolocation systems in certain portions of the 17.3–17.7 GHz band, in a limited number of geographic areas after April 1, 2007. The Commission is committed to protecting 17/24 GHz BSS consumers from harmful interference. However we also wish to accommodate national defense interests and appreciate the Defense Department's need to continue operating a limited number of existing radars in the 17.3–17.7 GHz band after April 1, 2007. Accordingly, we seek comment on what methods or criteria might be adopted to accommodate continued operation of these currently operating Federal radiolocation systems. Specifically, we seek comment on the typical interference scenarios that could occur between receiving 17/24 GHz BSS earth stations and existing Federal radiolocation systems. We ask whether case-by-case coordination or some other approach might best permit continued operation of Federal radiolocation systems in portions of the 17.3–17.7 GHz band following the introduction of 17/24 GHz BSS systems after April 1, 2007.

Ex Parte Presentations

45. The proceeding shall be treated as a ''permit-but-disclose'' proceeding in accordance with the Commission's ex parte rules. Persons making oral ex parte presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one- or two-sentence description of the views and arguments presented is generally required. Other rules pertaining to oral and written presentations are set forth in § 1.1206(b) of the Commission's rules as well.

Paperwork Reduction Act

46. The NPRM contains proposed new and modified information collection. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collections contained in the NPRM, as required by the Paperwork Reduction Act of 1995, Public Law 104–13. Public and agency comments are due 60 days from the date of publication of the NPRM in the **Federal Register**. Comments should address: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, *see* 44 U.S.C. 3506(c)(4), we seek specific comment on how we might ''further reduce the

information collection burden for small business concerns with fewer than 25 employees.''

47. A copy of any comments on the information collections contained herein should be submitted to Judy Boley Herman, Federal Communications Commission, Room 1–C804, 445 12th Street, SW., Washington, DC 20554, or via the Internet to *jbHerman@fcc.gov* and to Kristy L. LaLonde, OMB Desk Officer, Room 10234 NEOB, 725 17th Street, NW., Washington, DC 20503, or via the Internet to *Kristy_L.LaLonde@omb.eop.gov*, or via fax at 202–395–5167.

Initial Regulatory Flexibility Analysis

48. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this item, the Establishment of Policies and Service Rules for the Broadcasting-Satellite Service at the 17.3–17.7 GHz Frequency Band and at the 17.7–17.8 GHz Frequency Band Internationally, and at the 24.75–25.25 GHz Frequency Band for Fixed Satellite Services Providing Feeder Links to the Broadcasting-Satellite Service and for the Satellite Services Operating Bi-Directionally in the 17.3–17.8 GHz Frequency Band, Notice of Proposed Rulemaking. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the NPRM provided in paragraph 106 of this NPRM. The Commission will send a copy of the NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the NPRM and IRFA (or summaries thereof) will be published in the **Federal Register**.

A. Need for, and Objectives of, the Proposed Rules

49. In the NPRM the Commission makes proposals and seeks comment on service rules that will apply to U.S. licensees authorized to operate in the 17/24 GHz BSS band. Our objective in this proceeding is to promote prompt commencement of services in the 17/24 GHz BSS band. This newly allocated band is expected to introduce a new generation of broadband services to the public, providing a mix of local and domestic video, audio, data, video-on-demand, and multimedia services to residential and business subscribers in the United States. As discussed in greater detail below, the Commission is provisionally considering a rulemaking which proposes rules and procedures for operation in the 17/24 GHz BSS band, including requirements for licensing, service obligations, orbital spacing, adjacent band operations, reverse band operations, and shared band operations. Potential interference from primary adjacent-band radiolocation systems and in-band secondary radiolocation systems is also addressed. In addition, the *NPRM* also considers proposals for use of the 17.7–17.8 GHz BSS spectrum for provision of international services outside the United States.

50. The Commission is provisionally considering whether to apply the processing rules and requirements set forth in the *Space Station Licensing Reform Orders* to the 17/24 GHz BSS or whether to adopt another licensing mechanism, such as competitive bidding. If the Commission decides to apply the *Space Station Licensing Reform* framework, it is provisionally considering that the 17/24 GHz BSS will be classified as a ''GSO-like'' service and therefore a ''first-come, first-served'' licensing framework will apply to the service. Under this processing option, the Commission is considering applying the package of safeguards that are contained within the first-come, first-served processing scheme. These safeguards include a requirement that all GSO-like applicants awarded a license under this procedure to post a $3 million performance bond with the Commission within 30 days of license grant. They also require licensees to construct and launch the satellite consistent with a specified milestone schedule. If the licensee fails to meet an implementation milestone, the license becomes null and void and the bond is executed. The rules also limit applicants to a total of five pending applications and licenses for unbuilt satellites in a specific frequency band at any one time. In addition, the Commission is considering making 17/24 GHz BSS licensees subject to the same annual reporting requirements as most of our current space station licensees are subject to. These reports include, among other things, the status of space station construction and anticipated launch dates.

51. The Commission is also provisionally considering the adoption of a ten-year license term for all non-broadcast 17/24 GHz BSS licensees and an eight-year license term for 17/24 GHz BSS satellites that will operate as broadcast facilities. In addition, the Commission is provisionally considering the adoption of the grant-stamp procedure to process unopposed replacement 17/24 GHz BSS applications with technical characteristics consistent with those of the satellite to be retired.

52. Regarding non-U.S.-licensed satellite operators, the Commission is provisionally considering to evaluate requests for U.S. access by foreign-licensed 17/24 GHz BSS systems on a service-specific basis consistent with the framework established in the 1997 *DISCO II Order.* Thus, if this approach is adopted, in cases where systems licensed by World Trade Organization (WTO)-member countries seek to provide FSS to U.S. customers from their 17/24 GHz BSS systems, we will presume that entry will further competition. In cases where non-WTO-member countries seek to use these systems to serve the United States or where WTO-member countries seek to provide services such as DTH and DBS over 17/24 GHz BSS systems, we will apply the effective competitive opportunities test (ECO–SAT) to ensure that entry will not distort competition in the U.S market.

53. The Commission is also provisionally considering whether 17/24 GHz BSS licensees should be subject to public interest obligations, such as those currently imposed on providers of direct broadcast satellite services. Under these obligations, these providers are required to meet certain political broadcast requirements, compliance with children's television advertising limits, and to set aside four percent of channel capacity for noncommercial, educational or informational programming. Also, the Commission is provisionally considering rules that would result in the equal employment opportunity requirements set forth in Part 76 of the Commission's rules being applied to 17/24 GHz BSS licensees. In addition, the Commission is provisionally considering adopting rules that would require 17/24 GHz BSS licensees to provide service to Alaska and Hawaii where such service is technically feasible from the authorized orbit location. In addition, the Commission is provisionally considering applying EAS requirements on 17/24 GHz BSS operators.

54. The Commission is also provisionally considering rules that may apportion a specific frequency band for tracking, telemetry and command operations for 17/24 GHz BSS satellites. Also, the Commission is provisionally considering the adoption of rules for orbital spacing for 17/24 GHz BSS satellites.

55. The Commission is also provisionally considering rules

regarding adjacent band operations, reverse band operations, and shared band operations. If adopted, these rules would: (a) Require Direct Broadcast Satellite (DBS) service applicants seeking to operate within [TBD] degrees of a geostationary orbital location where a space station has already been authorized to operate in the Broadcasting Satellite Service (BSS) in the 17.3–17.8 GHz band (space-to-Earth) to submit a technical showing demonstrating their ability to maintain sufficient telecommand link margin in the presence of the interfering BSS signal; (b) require 17/24 GHz BSS applicants seeking to operate within [TBD] degrees of a geostationary orbital location where a space station has already been authorized to operate in the DBS service in the 17.3–17.8 GHz band (Earth-to-space) to submit a technical showing demonstrating their ability to avoid causing harmful interference to the existing DBS telecommand link; (c) require applicants proposing to co-locate DBS feeder link earth stations at sites where they are already authorized to operate earth stations receiving telemetry signals from space stations operating in the 17/24 GHz BSS service to submit a technical showing demonstrating their ability to maintain sufficient margin in their 17 GHz band telemetry links in the presence of the interfering DBS signal; (d) require applicants proposing to co-locate 17/24 GHz BSS TT&C earth stations at sites where they are already authorized to operate DBS feeder link earth stations to submit a technical showing demonstrating their ability to maintain sufficient margin in their 17 GHz band telemetry links in the presence of the interfering DBS signal; and (e) require applicants for feeder-link earth station licenses that propose to transmit with e.i.r.p. spectral density levels in excess of 5.6 dBW/Hz, under clear sky conditions, to submit a showing demonstrating that their higher power levels will not cause harmful interference to nearby satellites.

56. Establishing service rules for the 17/24 GHz BSS bands will facilitate the delivery of a new generation of satellite services to the public, thus stimulating competition in the communications marketplace. The delivery of these services is anticipated to include standard-definition and high-definition formats and may complement existing DBS service offered by applicants. Operation in the 17/24 GHz BSS band is anticipated to provide a mix of local and national video, audio, data, and video-on-demand to residential and business subscribers in the United States.

B. Legal Basis

57. The NPRM is adopted pursuant to §§ 1, 4(i), 4(j), 7(a), 301, 303(c), 303(f), 303(g), 303(r), 303(y), and 308 of the Communications Act of 1934, as amended, *47 U.S.C. 51, 154(i), 154(j), 157(a), 301, 303(c), 303(f), 303(g), 303(r), 303(y), 308.*

C. Description and Estimate of Number of Small Entities Affected by Proposals

58. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted. The RFA generally defines the term ''small entity'' as having the same meaning as the terms ''small business,'' ''small organization,'' and ''small governmental jurisdiction.'' In addition, the term ''small business'' has the same meaning as the term ''small business concern'' under the Small Business Act. A small business concern is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA). Below, we further describe and estimate the number of small entity licensees that may be affected by the adopted rules.

59. *Satellite Telecommunications.* The SBA has developed a small business size standard for Satellite Telecommunications, which consists of all such companies having $13.5 million or less in annual receipts. According to Census Bureau data for 2002, there were 536 firms in the category Satellite Telecommunications, total that operated for the entire year. Of this total, 49 firms had annual receipts of $5 million to $9,999,999 and an additional 99 firms had annual receipts of $10 million or more. Thus, under this size standard, the majority of firms can be considered small.

60. *Space Stations (Geostationary).* Commission records reveal that there are 44 space station licensees. We do not request nor collect annual revenue information concerning such licensees, and thus are unable to estimate the number of geostationary space stations that would constitute a small business under the SBA definition cited above, or apply any rules providing special consideration for Space Station (Geostationary) licensees that are small businesses.

61. *Fixed Satellite Transmit/Receive Earth Stations.* Currently there are approximately 1142 operational fixed-satellite transmit/receive earth stations authorized for use in the Ku-bands. The Commission does not request or collect annual revenue information, and thus is unable to estimate the number of earth stations that would constitute a small business under the SBA definition.

62. *Cellular and Other Wireless Telecommunications.* The SBA has developed a small business size standard for Cellular and Other Wireless Telecommunications, which consists of all such firms having 1,500 or fewer employees. According to Census Bureau data for 2002, in this category there was a total of 8,863 firms that operated for the entire year. Of this total, 401 firms had 100 or more employees, and the remainder had fewer than 100 employees.

D. Projected Reporting, Recordkeeping, and Other Compliance Requirements

63. The proposed rules would, if adopted, require a Direct Broadcast Satellite (DBS) service applicant seeking to operate within [TBD] degrees of a geostationary orbital location where a space station has already been authorized to operate in the broadcasting-satellite service in the 17.3–17.8 GHz band (space-to-Earth) to submit a technical showing which demonstrates its ability to maintain sufficient telecommand link margin in the presence of the interfering Broadcasting-Satellite Service (BSS) signal. This requirement will aid in ensuring that DBS operators seeking to operate in these locations will be able to maintain their telecommand link in order to maintain control of their satellites.

64. Also, a 17/24 GHz BSS applicant seeking to operate within [TBD] degrees of a geostationary orbital location where a space station has already been authorized to operate in the DBS service in the 17.3–17.8 GHz band (Earth-to-space), will be required, under the proposed rules, to submit a technical showing which demonstrates its ability to maintain sufficient telecommand link margin in the presence of the interfering DBS service signal. This requirement will aid in ensuring that BSS operators seeking to operate in these locations will be able to maintain their telecommand link in order to maintain control of their satellites.

65. The proposed rules would also require that applicants proposing to co-locate DBS feeder link earth stations at sites where they are already authorized to operate earth stations receiving telemetry signals from space stations operating in the 17/24 GHz BSS service, must submit a technical showing demonstrating their ability to maintain sufficient margin in the 17 GHz band

telemetry links in the presence of an interfering DBS signal. This requirement will aid in ensuring that DBS earth station operators can monitor the health and status of their satellites in the presence of an interfering signal from the DBS feeder link.

66. The proposed rules would also require that applicants proposing to co-locate 17/24 GHz BSS TT&C earth stations at sites where they are already authorized to operate DBS feeder link earth stations must submit to the Commission a technical showing which demonstrates their ability to maintain sufficient margin in their 17 GHz band telemetry links in the presence of an interfering DBS signal. This requirement will aid in ensuring that the BSS TT&C earth station operators will be able to maintain their telecommand link in order to maintain control of their satellites.

67. Finally, the proposed rules would require that each applicant for a feeder-link earth station license that proposes to transmit with e.i.r.p. spectral density levels in excess of 5.6 dBW/Hz, under clear sky conditions, shall submit (1) link budget analyses of its proposed operations, along with a detailed written explanation of how each uplink and each transmitted satellite carrier density figure is derived, and (2) a narrative summary which indicates whether there are margin shortfalls in any of the current baseline services as a result of the addition of the applicant's higher power service. If there are such shortfalls, each applicant must submit an explanation of how the applicant intends to resolve the margin shortfalls. In addition, such applicants shall certify that all potentially affected parties acknowledge, and do not object to, the applicant's use of the higher power densities. This requirement will aid in ensuring that earth station operators proposing to operate in excess of the level described above will not cause harmful interference to adjacent co-frequency satellites.

68. The Commission does not expect significant costs to be associated with these proposals, if adopted. Therefore, we do not anticipate that the burden of compliance would be greater for smaller entities.

E. Steps Taken To Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

69. The RFA requires that, to the extent consistent with the objectives of applicable statutes, the analysis shall discuss significant alternatives such as: (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.

70. The proposed rules are necessary for the efficient operation of the 17/24 GHz BSS band, which is expected to introduce a new generation of broadband services to the public. We are provisionally considering rules and procedures for operation in the 17/24 GHz BSS band, including requirements for a licensing framework, service obligations, license terms, non-U.S.-licensed satellite operators, public interest obligations, equal employment opportunity requirements, geographic service requirements, tracking, telemetry and command operations, and orbital spacing requirements. We seek comment on alternatives to these provisionally considered rules and procedures that would minimize the economic impact on small entities. We also seek comment on the establishment of differing compliance or reporting requirements that take into account the resources available to small entities.

71. In addition, the Commission is provisionally considering the adoption of rules that would facilitate adjacent band operations, reverse band operations, and shared band operations. We believe that these proposed rules, which may require a technical showing demonstrating the licensee's ability to operate without causing interference to other satellites, are necessary for the efficient administration of bandwidth because they will ensure that operators in the 17/24 GHz BSS band and the DBS service can operate compatibly. We have considered alternatives and believe these are the most equitable solutions to the potential interference problems posed by the operation of the 17/24 GHz BSS service. For example, one alternative is to require that technical showings be made after operation has begun. We rejected this alternative because we concluded that it would not be as efficient as requiring that technical showings be made before operation. This is because, in many instances, harmful interference will invariably occur, which will lead to disruptions in service. By requiring that technical showings be made prior to operation, we anticipate that there will be far fewer instances of harmful interference. We seek comment on viable alternatives to these rules or their reporting requirements that would lessen the economic impact on small entities. We also seek comment on the establishment of differing compliance or reporting requirements that take into account the resources available to small entities. The NPRM seeks comment on these proposals, including the effectiveness and utility of the proposals, and also seeks comment on how to minimize undue burdens on small business.

E. Federal Rules That May Duplicate, Overlap, or Conflict With the Proposed Rules

72. None.

Comment Filing Procedures

73. Pursuant to § 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments in response to the NPRM no later than on or before 75 days after **Federal Register** publication. Reply comments to these comments may be filed no later than on or before 105 days after **Federal Register** publication. All pleadings are to reference IB Docket No. 06–90. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. Parties are strongly encouraged to file electronically. *See* Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24,121 (1998).

74. Comments filed through the ECFS can be sent as an electronic file via the Internet to *http://www.fcc/gov/e-file/ecfs.html*. Parties should transmit one copy of their comments to the docket in the caption of this rulemaking. In completing the transmittal screen, commenters should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to *ecfs@fcc.gov* and should include the following words in the body of the message, ''get form <your e-mail address>.'' A sample form and directions will be sent in reply.

75. Parties choosing to file by paper must file an original and four copies of each filing in IB Docket No. 05–20. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). If more than one docket or rulemaking number appears in the caption of this proceeding, commenters must submit two additional copies for each additional docket or rulemaking number. The Commission's mail contractor, Vistronix, Inc. will receive hand-delivered or messenger-delivered

paper filings for the Commission's Secretary at 236 Massachusetts Avenue, NE., Suite 110, Washington, DC 20002. The filing hours at this location are 8 a.m. to 7 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743. U.S. Postal Service first-class mail, Express Mail, and Priority Mail should be addressed to 445 12th Street, SW., Washington, DC 20554. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

76. Comments submitted on diskette should be on a 3.5 inch diskette formatted in an IBM-compatible format using Word for Windows or compatible software. The diskette should be clearly labeled with the commenter's name, proceeding (including the docket number, in this case, IB Docket No. 05–20), type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase ''Disk Copy—Not an Original.'' Each diskette should contain only one party's pleadings, preferably in a single electronic file.

77. All parties must file one copy of each pleading electronically or by paper to each of the following: (1) The Commission's duplicating contractor, Best Copy and Printing, Inc., 445 12th Street, SW., Room CY–B402, Washington, DC 20554, telephone (202) 488–5300, facsimile (202) 488–5563, or via e-mail at *FCC@BCPIWEB.COM*.

78. Comments and reply comments and any other filed documents in this matter may be obtained from Best Copy and Printing, Inc., in person at 445 12th Street, SW., Room CY–B402, Washington, DC 20554, via telephone at (202) 488–5300, via facsimile (202) 488–5563, or via e-mail at *FCC@BCPIWEB.COM*. The pleadings will be also available for public inspection and copying during regular business hours in the FCC Reference Information Center, Room CY–A257, 445 Twelfth Street, SW., Washington, DC 20554 and through the Commission's Electronic Filing System (ECFS) accessible on the Commission's World Wide Web site, *http://www.fcc.gov*.

79. Comments and reply comments must include a short and concise summary of the substantive arguments raised in the pleading. Comments and reply comments must also comply with § 1.49 and all other applicable sections of the Commission's rules. All parties are encouraged to utilize a table of contents, and to include the name of the filing party and the date of the filing on each page of their submission. We also strongly encourage that parties track the organization set forth in this Notice in order to facilitate our internal review process.

80. Commenters who file information that they believe is proprietary may request confidential treatment pursuant to Section 0.459 of the Commission's rules. Commenters should file both their original comments for which they request confidentiality and redacted comments, along with their request for confidential treatment. Commenters should not file proprietary information electronically. *See* Examination of Current Policy Concerning the Treatment of Confidential Information Submitted to the Commission, *Report and Order*, 13 FCC Rcd 24816 (1998), *Order on Reconsideration*, 14 FCC Rcd 20128 (1999). Even if the Commission grants confidential treatment, information that does not fall within a specific exemption pursuant to the Freedom of Information Act (FOIA) must be publicly disclosed pursuant to an appropriate request. *See* 47 CFR 0.461; 5 U.S.C. 552. We note that the Commission may grant requests for confidential treatment either conditionally or unconditionally. As such, we note that the Commission has the discretion to release information on public interest grounds that does fall within the scope of a FOIA exemption.

81. *Accordingly, it is ordered* pursuant to §§ 1, 4(i), 4(j), 7(a), 301, 303(c), 303(f), 303(g), 303(r), 303(y), and 308 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i), 154(j), 157(a), 301, 303(c), 303(f), 303(g), 303(r), 303(y), 308, that this Notice of Proposed Rulemaking in IB Docket No. 06–123 is hereby *adopted*.

82. *It is further ordered* that the Consumer Information Bureau, Reference Information Center, *shall send* a copy of this Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects

47 CFR Part 2

Telecommunications.

47 CFR Part 25

Satellites.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

Rule Changes

For the reasons discussed above, the Federal Communications Commission proposes to amend 47 CFR parts 2 and 25 as follows:

PART 2—FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

1. The authority citation for part 2 continues to read as follows:

Authority: 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.

2. Section 2.106, the Table of Frequency Allocations, is amended as follows:

a. Revise page 48.

b. In the list of non-Federal Government footnotes, revise footnotes NG163 and NG 167.

§ 2.106 Table of Frequency Allocations.

BILLING CODE 6712–01–P

15.35-15.4 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.511			15.35-15.4 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246		
15.4-15.43 AERONAUTICAL RADIONAVIGATION 5.511D			15.4-15.43 AERONAUTICAL RADIONAVIGATION US260 US211		Aviation (87)
15.43-15.63 FIXED SATELLITE (Earth-to-space) 5.511A AERONAUTICAL RADIONAVIGATION 5.511C			15.43-15.63 AERONAUTICAL RADIONAVIGATION US260 5.511C US211 US359	15.43-15.63 FIXED SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION US260 5.511C US211 US359	Satellite Communications (25) Aviation (87)
15.63-15.7 AERONAUTICAL RADIONAVIGATION 5.511D			15.63-15.7 AERONAUTICAL RADIONAVIGATION US260 US211		Aviation (87)
15.7-16.6 RADIOLOCATION 5.512 5.513			15.7-16.6 RADIOLOCATION G59	15.7-17.2 Radiolocation	Private Land Mobile (90)
16.6-17.1 RADIOLOCATION Space research (deep space) (Earth-to-space) 5.512 5.513			16.6-17.1 RADIOLOCATION G59 Space research (deep space) (Earth-to-space)		
17.1-17.2 RADIOLOCATION 5.512 5.513			17.1-17.2 RADIOLOCATION G59		
17.2-17.3 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.512 5.513 5.513A			17.2-17.3 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION G59 SPACE RESEARCH (active)	17.2-17.3 Radiolocation Earth exploration-satellite (active) Space research (active)	
17.3-17.7 FIXED-SATELLITE (Earth-to-space) 5.516 (space-to-Earth) 5.516A 5.516B Radiolocation 5.514	17.3-17.7 FIXED-SATELLITE (Earth-to-space) 5.516 BROADCASTING-SATELLITE Radiolocation 5.514 5.515 5.517	17.3-17.7 FIXED-SATELLITE (Earth-to-space) 5.516 Radiolocation 5.514	17.3-17.7 Radiolocation US259 G59	17.3-17.7 FIXED-SATELLITE (Earth-to-space) US271 BROADCASTING-SATELLITE NG163 US259	Satellite Communications (25)

BILLING CODE 6712–01–C

Non-Federal Government Footnotes

* * * * *

NG163 The allocation to the broadcasting-satellite service in the band 17.3–17.7 GHz shall come into effect on 1 April 2007. Use of the 17.3–17.7 GHz band by the broadcasting-satellite service is limited to geostationary satellite orbit systems.

* * * * *

NG167 The use of the fixed-satellite service (Earth-to-space) in the band 24.75–25.25 GHz is limited to feeder links for the broadcasting-satellite service. The allocation to the fixed-satellite service (Earth-to-space) in the band 24.75–25.25 GHz shall come into effect on 1 April 2007.

* * * * *

PART 25—SATELLITE COMMUNICATIONS

3. The authority citation for part 25 continues to read as follows:

Authority: 47 U.S.C. 701–744. Interprets or applies §§ 4, 301, 302, 307, 309 and 332 of the Communications Act, as amended, 47 U.S.C. 154, 301, 302, 303, 307, 309 and 332, unless otherwise noted.

4. Section 25.114 is amended by adding paragraphs (d)(15) and (d)(16) to read as follows:

§ 25.114 Application for Space Station Authorizations.

* * * * *

(d) * * *

(15) For satellite applications in the Direct Broadcast Satellite service seeking to operate within [TBD] degrees of a geostationary orbital location where a space station has already been authorized to operate in the broadcasting-satellite service in the 17.3–17.7 GHz band (space-to-Earth), a technical showing with regard to its telecommand link margin in accordance with § 25.148(g).

(16) For satellite applications in the 17/24 GHz broadcasting-satellite service seeking to operate within [TBD] degrees of a geostationary orbital location where a direct broadcast satellite (DBS) space station has already been authorized to operate that has feeder links in the 17.3–17.8 GHz band (Earth-to-space), a technical showing with regard to the DBS system's telecommand link margin as in accordance with § 25.141(e).

5. Section 25.121 is amended by revising paragraph (a) to read as follows:

§ 25.121 License term and renewals.

(a) *License Term.* Except for licenses for DBS and 17/24 GHz facilities, licenses for facilities governed by this part will be issued for a period 15 years. Licenses for DBS and 17/24 GHz space stations licensed as broadcast facilities will be issued for a period of 8 years. Licenses for DBS and 17/24 GHz space stations not licensed as broadcast facilities will be issued for a period of 10 years.

* * * * *

6. Add § 25.141 to subpart B to read as follows:

§ 25.141 Licensing Provisions for the 17/24 GHz Broadcasting Satellite Service.

(a) *License terms.* License terms for 17/24 GHz facilities are specified in § 25.121(a).

(b) *Due Diligence.*

(c) *Geographic service requirements.*

(d) *Bond Requirement.*

(e) *Co-location with DBS space stations.* A 17/24 GHz BSS applicant seeking to operate within [TBD] degrees of a geostationary orbital location where a space station has already been authorized to operate in the direct broadcast satellite (DBS) service in the 12.2–12.7 GHz band that is authorized to use feeder links in the 17.3–17.8 GHz band (Earth-to-space), must submit to the Commission a technical showing demonstrating its ability to avoid causing harmful interference to the DBS operator, such that the DBS system is able to maintain sufficient margin in its telecommand link in the presence of the interfering BSS signal.

(f) *Limit on pending applications.*

(g) *Milestone requirements.*

(h) *Replacement satellites.*

(i) *Non-U.S.-licensed satellites.*

(j) *Public interest.*

(k) *Equal employment opportunity.*

7. Section 25.148 is amended by adding paragraphs (g) and (h) to read as follows:

§ 25.148 Licensing provisions for the Direct Broadcast Satellite Service.

* * * * *

(g) *Co-location with 17/24 GHz BSS space stations.* A DBS applicant seeking to operate within [TBD] degrees of a geostationary orbital location where a space station has already been authorized to operate in the broadcasting-satellite service in the 17.3–17.7 GHz band (space-to-Earth), must submit to the Commission a technical showing demonstrating its ability to maintain sufficient telecommand link margin in the presence of the interfering BSS signal.

(h) *Co-location of DBS feeder links and 17/24 GHz BSS TT&C earth stations.* Applicants proposing to co-locate their DBS feeder link earth stations at sites where they are already authorized to operate earth stations receiving telemetry signals from space stations operating in the 17/24 GHz BSS service, must submit to the Commission a technical showing demonstrating their ability to maintain sufficient margin in their 17 GHz band telemetry links in the presence of the interfering DBS feeder-link signal.

8. Section 25.201 is amended by adding the following definition in alphabetical order to read as follows:

§ 25.201 Definitions.

* * * * *

Broadcasting-Satellite Service. A radiocommunication service in which signals transmitted or retransmitted by space stations are intended for direct reception by the general public. In the broadcasting-satellite service, the term *direct reception* shall encompass both individual reception and community reception.

* * * * *

9. Amend § 25.202 as follows:

a. In paragraph (a)(1), add a new entry and its footnote in numerical order to the ''Earth-to-space (GHz)'' column of the Table.

b. Add paragraph (a)(9).

§ 25.202 Frequencies, frequency tolerance and emission limitations.

(a)(1) * * *

Space-to-earth (GHz)	Earth-to-space (GHz)
* * *	* *
	[18]24.75–25.25
* * *	* *

[18] Use of the band 24.75–25.25 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for space stations in the broadcasting-satellite service. The allocation to the fixed-satellite service (Earth-to-space) in the band 24.75–25.25 GHz shall come into effect on 1 April 2007.

* * * * *

(9) The following frequencies are available for use by the Broadcasting-Satellite Service after 1 April 2007:

17.3–17.7 GHz (space-to-Earth)

17.7–17.8 GHz (space-to-Earth)

Use of the 17.3–17.7 GHz band by the broadcasting-satellite service is limited to geostationary satellite orbit systems. Use of the 17.7–17.8 GHz band (space-to-Earth) by the broadcasting-satellite service is limited to transmissions from geostationary satellite orbit systems to receiving earth stations located outside of the United States and its Possessions.

* * * * *

10. Section 25.208 is amended by revising paragraph (c) introductory text to read as follows:

§ 25.208 Power flux density limits.

* * * * *

(c) In the 17.7–17.8 GHz, 18.3–18.8 GHz, 19.3–19.7 GHz, 22.55–23.00 GHz, 23.00–23.55 GHz, and 24.45–24.75 GHz

frequency bands, the power flux-density at the Earth's surface produced by emissions from a space station for all conditions for all methods of modulation shall not exceed the following values:

* * * * *

11. Add § 25.223 to read as follows:

§ 25.223 Technical requirements for space stations operating in the 17/24 GHz broadcasting-satellite service.

All space stations operating in the 17/24 GHz broadcasting-satellite service shall employ state-of-the art full frequency re-use either through the use of orthogonal polarizations within the same beam and/or the use of spatially independent beams.

12. Section 25.251 is amended by revising paragraph (b) and adding paragraph (c) as follows:

§ 25.251 Special requirements for coordination.

* * * * *

(b) The administrative aspects of the coordination process in the case of coordination of DBS feeder-link earth stations with 17/24 GHz BSS receiving earth stations are set forth in § 25.xxx in combination with the additional technical parameters set forth in [TBD].

(c) The technical aspects of coordination are based on Appendix 7 of the International Telecommunication Union Radio Regulations and certain recommendations of the ITU Radiocommunication Sector (available at the FCC's Reference Information Center, Room CY–A257, 445 12th Street, SW., Washington, DC 20554).

13. Add § 25.262 to subpart C to read as follows:

§ 25.262 Technical requirements for 24 GHz band feeder link earth stations transmitting to space stations in the broadcasting-satellite service.

(a) All applications for an FSS feeder-link earth station license in the 24.75–25.25 GHz band shall meet the following requirements:

(1) The feeder link earth station antenna shall not transmit with e.i.r.p. spectral density levels in excess of 5.6 dBW/Hz, under clear sky conditions, except as otherwise provided by this part.

(2) Each applicant for feeder-link earth station license(s) that proposes levels in excess of those defined in paragraph (a)(1) of this section shall submit link budget analyses of the operations proposed along with a detailed written explanation of how each uplink and each transmitted satellite carrier density figure is derived. Applicants shall also submit a narrative summary which must indicate whether there are margin shortfalls in any of the current baseline services as a result of the addition of the applicant's higher power service, and if so, how the applicant intends to resolve those margin short falls. Applicants shall certify that all potentially affected parties (i.e., those 17/24 GHz GSO BSS satellite networks that are [TBD] degrees apart) acknowledge and do not object to the use of the applicant's higher power densities.

(3) Licensees authorized pursuant to paragraph (a)(2) of this section shall bear the burden of coordinating with any future applicants or licensees whose proposed compliant operations at [TBD] degrees or smaller orbital spacing, as defined by paragraph (a)(1) of this section, is potentially or actually adversely affected by the operation of the non-compliant licensee. If no good faith agreement can be reached, however, the non-compliant licensee shall reduce its earth station power density levels to be compliant with those specified in paragraph (a)(1) of this section.

(b) Applicants proposing to co-locate their 17/24 GHz BSS TT&C earth stations at sites where they are already authorized to operate DBS feeder link earth stations, must submit to the Commission a technical showing demonstrating their ability to maintain sufficient margin in their 17 GHz band telemetry links in the presence of the interfering DBS signal.

14. Add § 25.263 to subpart C to read as follows:

§ 25.263 Special coordination requirements for DBS feeder link earth stations to protect 17/24 GHz BSS receiving earth stations.

(a) *Coordination with 17/24 GHz BSS receiving earth stations.* Feeder-link earth station applicant planning to operate in the 17.3–17.8 GHz band shall coordinate the proposed frequency usage with 17/24 GHz BSS receiving earth stations, including 17/24 GHz BSS TT&C earth stations, in accordance with the procedures set forth in § 25.251.

(b) In computing the coordination distance for the transmitting DBS feeder-link earth station, the applicant shall use the following technical parameters:

Parameter(s)	Value	Description
Orbit	GSO	Orbit in which the space service in which receiving earth station operates (GSO or NGSO).
Modulation at receiving earth station	[TBD]	Analog or digital.
Receiving earth station interference parameters and criteria:		
p_o (%)	[TBD]	Percentage of the time during which interference from all sources may exceed the threshold value.
n	[TBD]	Number of equivalent, equal level, equal probability entries of interference, assumed to be uncorrelated for small percentages of the time.
p(%)	[TBD]	Percentage of the time during which the interference from one source may exceed the permissible interference power value; since the entries of interference are not likely to occur simultaneously, $p= p_o/n$
N_L (dB)	[TBD]	Link noise contribution.
M_s (dB)	[TBD]	Link performance margin.
W (dB)	[TBD]	A thermal noise equivalence factor for interfering emissions in the reference bandwidth; it is positive when the interfering emissions would cause more degradation than thermal noise.
Receiving earth station parameters:		
G_m (dBi)	[TBD]	On-axis gain of the receive earth station antenna.
G_r	[TBD]	Horizon antenna gain for the receive earth station.
ε_{min}	[TBD]	Minimum elevation angle of operation in degrees.
T_e (K)	[TBD]	The thermal noise temperature of the receiving system at the terminal of the receiving antenna.
Reference Bandwidth:		

Parameter(s)	Value	Description
B (Hz)	[TBD]	Reference bandwidth (Hz), i.e., the bandwidth in the receiving station that is subject to the interference and over which the power of the interfering emission can be averaged.
Permissible interference power: $P_r(p)$ (dBW) in B	[TBD]	Permissible interference power of the interfering emission (dBW) in the reference bandwidth to be exceeded no more than p% of the time at the receiving antenna terminal of a station subject to interference, from a single source of interference, using the general formula: $P_r(p) = 10 \log (k T_e B) + N_L + 10 \log (10^{Ms/10} - 1) - W$.

(c) The feeder-link earth station applicant shall provide each such 17/24 GHz BSS licensee, and prior-filed applicant with the technical details of the proposed earth station and the relevant coordination distance calculations that were made. At a minimum, the earth station applicant shall provide the 17/24 GHz BSS licensee, and/or prior filed applicants with the following technical information:

(1) The geographical coordinates of the proposed earth station antenna(s);

(2) Proposed operating frequency band(s) and emission(s);

(3) Antenna center height above ground and ground elevation above mean sea level;

(4) Antenna gain pattern(s) in the plane of the main beam;

(5) Longitude range of geostationary satellite orbit (GSO) satellites at which antenna may be pointed, for proposed earth station antenna(s) accessing GSO satellites;

(6) Horizon elevation plot;

(7) Antenna horizon gain plot(s) determined in accordance with the procedure in Section 2.1 of Annex 5 to Appendix 7;

(8) Minimum elevation angle;

(9) Maximum equivalent isotropically radiated power (e.i.r.p.) density in the main beam in any [TBD] Hz band;

(10) Maximum available RF transmit power density in any [TBD] Hz band at the input terminals of the antenna(s);

(11) Maximum permissible RF interference power level as determined in accordance with Annex 7 to Appendix 7 for all applicable percentages of time; and

(12) A plot of the coordination distance contour(s) and rain scatter coordination distance contour(s) as determined by Table 2 of Section 3 to Appendix 7.

[FR Doc. 06–6630 Filed 8–1–06; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[DA 06–1451; MB Docket No. 05–229; RM–10780]

Radio Broadcasting Services; Madisonville and Rosebud, TX

AGENCY: Federal Communications Commission.

ACTION: Proposed rule; dismissal.

SUMMARY: This document, at the request of Petitioner Charles Crawford, dismisses his pending petition for rulemaking to allot Channel 267A at Rosebud, Texas. The dismissed proposal would have required a change in reference coordinates for Channel 267A at Madisonville, Texas, and the reclassification of Station KNUE(FM), Tyler, Texas to a Class C0 facility. The document therefore terminates this proceeding.

ADDRESSES: Federal Communications Commission, 445 12th Street, SW., Washington, DC 20554.

FOR FURTHER INFORMATION CONTACT: Helen McLean, Media Bureau (202) 418–2738.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission's Report and Order, MB Docket No. 05–229, adopted July 12, 2006, and released July 14, 2006. The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC Reference Information Center (Room CY–A257), 445 12th Street, SW., Washington, DC 20554. This document may also be purchased from the Commission's duplicating contractors, Best Copy and Printing, Inc., 445 12th Street, SW., Room CY–B402, Washington, DC 20554, telephone 1–800–378–3160 or *http://www.BCPIWEB.com.* This document is not subject to the Congressional Review Act. (The Commission, is, therefore, not required to submit a copy of this *Report and Order* to the Government Accountability Office, pursuant to the Congressional Review Act, *see* 5 U.S.C. Section 801(a)(1)(A) since this proposed rule is dismissed, herein.)

Federal Communications Commission.

John A. Karousos,

Assistant Chief, Audio Division, Media Bureau.

[FR Doc. E6–12319 Filed 8–1–06; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Surface Transportation Board

49 CFR Parts 1111, 1114, 1115 and 1244

[STB Ex Parte No. 646 (Sub-No. 1)]

Simplified Standards for Rail Rate Cases

AGENCY: Surface Transportation Board, DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Surface Transportation Board has instituted a proceeding to seek public comments on proposed changes to revise and clarify its guidelines for deciding small rate cases. In particular, the Board proposes to: create a simplified stand-alone cost (Simplified-SAC) method to be used in medium-size rate disputes for which a full stand-alone cost (Full-SAC) presentation would be too costly, given the value of the case; retain the Three-Benchmark method for small rate disputes for which a Simplified-SAC presentation would be too costly; and establish eligibility presumptions to distinguish between large, medium-size, and small rail rate disputes. These changes are intended to advance Congress' mandate to ''establish a simplified and expedited method for determining the reasonableness of challenged rail rates in those cases in which a full SAC presentation is too costly, given the value of the case.'' 49 U.S.C. 10701(d)(3).

DATES: Notices of intent to participate are due on September 1, 2006. Comments are due on September 29, 2006. Replies are due on October 30,