For further information contact: John Summerhayes, Criteria Pollutant Section, Air Programs Branch (AR–18J), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604.

SUPPLEMENTARY INFORMATION: For additional information, see the direct final rule published in the rules section of this Federal Register.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Hydrocarbons, Intergovernmental relations, Nitrogen dioxide, Ozone, and Reporting and recordkeeping requirements.

Authority: 42 U.S.C. 7401 et seq.


Robert W. Varney,
Regional Administrator, EPA-New England.

[FR Doc. 04–2067 Filed 1–30–04; 8:45 am]
BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[OH188–1b; FRL–7616–5]

Redesignation and Approval of Ohio Implementation Plan

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing to redesignate Lucas County, Ohio, to an attainment area for sulfur dioxide (SO2). EPA further proposes to approve Ohio’s plan for continuing to attain the SO2 standards. Finally, EPA proposes to approve State rule limits for two sources that are equivalent to the current limits for these sources.

DATES: Written comments on this proposed rule must arrive on or before March 3, 2004.

ADDRESSES: You should mail written comments to: J. Elmer Bortzer, Acting Chief, Air Programs Branch (AR–18J), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604.

Comments may also be submitted electronically, or through hand delivery/courier. Commenters are advised to review the information and follow the instructions for submitting comments as described in part (I)(B) of the SUPPLEMENTARY INFORMATION section of the companion direct final rule published in the rules section of this Federal Register.

You may inspect copies of Ohio’s submittal at: Criteria Pollutant Section, Air Programs Branch (AR–18J), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604.

FOR FURTHER INFORMATION CONTACT: John Summerhayes, Criteria Pollutant Section, Air Programs Branch (AR–18J), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 886–6067, summerhayes.john@epa.gov.

SUPPLEMENTARY INFORMATION: For additional information, see the direct final rule published in the rules section of this Federal Register.

List of Subjects

40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements, Sulfur dioxide.

40 CFR Part 81

Air pollution control, National parks, Wilderness areas.

Authority: 42 U.S.C. 7401 et seq.


Bharat Mathur,
Acting Regional Administrator, Region 5.

[FR Doc. 04–1967 Filed 1–30–04; 8:45 am]
BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 25, 74, and 78

[ET Docket No. 03–254; FCC 03–318]

Coordination Between the Non-Geostationary and Geostationary Satellite Orbit

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: This document proposes to modify our frequency coordination rules to promote sharing between non-geostationary satellite orbit (NGSO) and geostationary satellite orbit (GSO) fixed-satellite service (FSS) operations and various terrestrial services operating in several frequency bands. We undertake this proceeding to facilitate the introduction of new satellite and terrestrial services while promoting interference protection among the various users in these bands.

DATES: Comments must be filed on or before March 3, 2004, and reply comments must be filed on or before March 18, 2004.

FOR FURTHER INFORMATION CONTACT: Ted Ryder, Office of Engineering and Technology, (202) 418–2803, e-mail: tryder@fcc.gov, or James Miller, (202) 418–7351 TTY (202) 418–2989, e-mail: jjmiller@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission’s Notice of Proposed Rule Making. ET Docket No. 03–254, FCC 03–318, adopted December 15, 2003 and released December 23, 2003. The full text of this document is available for inspection and copying during normal business hours in the FCC Reference Center (Room CY–A257), 445 12th Street, SW., Washington, DC 20554. The complete text of this document also may be purchased from the Commission’s copy contractor, Qualex International, 445 12th Street SW., Room, CY–B402, Washington, DC 20554. The full text may also be downloaded at: http://www.fcc.gov.

Alternate formats are available to persons with disabilities by contacting Brian Millin at (202) 418–7426 or TTY (202) 418–7365.

Pursuant to §§ 1.415 and 1.419 of the Commission’s rules, 47 CFR 1.415, 1.419, interested parties may file comments on or before March 3, 2004, and reply comments on or before March 18, 2004. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS) or by filing paper copies. See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121, May 1, 1998. Comments filed through the ECFS can be sent as an electronic file via the Internet to http://www.fcc.gov/e-file/ecfs.html.

Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. 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. Parties who choose to file by paper must file an original and four copies of each filing.
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.

All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission. 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). The Commission’s contractor, Natek, 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 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, D.C. 20554.

Summary of Notice of Proposed Rulemaking

1. The Notice of Proposed Rulemaking (NPRM) proposes to modify the Commission’s frequency coordination rules to promote sharing between non-geostationary satellite orbit (NGSO) and geostationary satellite orbit (GSO) fixed-satellite service (FSS) operations and various terrestrial services operating in several frequency bands. Specifically, we consider a joint proposal by SkyBridge L.L.C. and the Fixed Wireless Communications Coalition (Skybridge/FWCC Growth Zone Proposal) to supplement our existing coordination procedures to promote sharing between new NGSO FSS space-to-Earth (downlink) operations and existing Fixed Service (FS) operations in the 10.7–11.7 GHz (10 GHz) band. We also set forth proposals for amending our frequency coordination rules to address situations where NGSO FSS and GSO FSS operations share spectrum with terrestrial operations in the FS, Broadcast Auxiliary Service (BAS) and Cable Television Relay Service (CARS) in various bands. Specifically, we:

   • Propose to apply the principles of the Skybridge/FWCC Growth Zone Proposal to our coordination rules for NGSO FSS downlink operations sharing with FS operations in the 10 GHz band;

   • Propose to apply the existing parts 25 and 101 coordination rules for coordination of new FSS (both NGSO and GSO) earth stations with mobile BAS/CARS operations in the 6875–7075 MHz (7 GHz) and 12750–13250 MHz (13 GHz) bands, and consider whether any additions or modifications to the rules are needed to address the operating characteristics of mobile services;

   • Propose to allow either the parts 74 and 78 informal ad hoc coordination rules or the part 101 coordination rules to be used for the coordination of mobile BAS/CARS operations with FSS (both NGSO and GSO) earth stations, in the 7 GHz and 13 GHz bands, and consider whether any additions or modifications of these rules are needed; and,

   • Propose to apply the existing parts 25 and 101 coordination rules for sharing between new NGSO FSS earth stations and fixed BAS/CARS operations in the 7 GHz and 13 GHz bands.

We undertake this proceeding to facilitate the introduction of new satellite and terrestrial services while promoting interference protection among the various users in these bands.

A. Coordination Between NGSO FSS and FS Operations at 10 GHz

2. Proposal. We tentatively conclude that our frequency coordination procedures should be modified to include the terms as we propose to modify them, below, of the Skybridge/FWCC Growth Zone Proposal for NGSO FSS gateway earth stations coordinating with the FS in the 10 GHz band. We believe that modifying our coordination requirements in this way will ensure that the use of the 10 GHz band by FS is not significantly hindered by the introduction of NGSO FSS gateway operations and that NGSO FSS operators will have more flexibility in deciding where to locate gateway earth stations. We note that the 10 GHz band has been targeted as an important alternative spectrum for FS operations being relocated from other bands. FS use in this band has been seen continued growth. We do not think that the proposed coordination approach will significantly hinder NGSO FSS operations. The areas qualifying for Growth Zone treatment would be limited and, by their design and purpose, the number of NGSO FSS gateway earth stations should be small and have sufficient deployment flexibility. Finally, we believe that the coordination obligations put forth by Skybridge/FWCC are reasonable, and note that we also apply an NGSO FSS gateway earth station licensee determines that deployment within a Growth Zone is necessary. We request comment on our tentative conclusions regarding the effectiveness and benefits of the Skybridge/FWCC Growth Zone Proposal and whether FS expansion can be accommodated under this approach.

3. We note that the Skybridge/FWCC Growth Zone Proposal reflects a compromise reached by two significant parties in this proceeding, but it is prudent to address all of the various interests in the band. Therefore, we intend to explore alternatives to some of the procedures in the SkyBridge/FWCC Growth Zone Proposal and seek comment on them. First, we propose to adopt the qualification criteria in the SkyBridge/FWCC Growth Zone definition of any county in which at least 30 FS frequencies are licensed to transmit in the 10.7–11.7 GHz band. We acknowledge the advantages of using counties as Growth Zone boundaries in that they are well defined. The use of counties would also be administratively convenient, since this information is readily available in our license and other coordination databases. Further, a minimum fixed number of FS operations (30 FS transmit frequencies per county) would provide an easy and definitive method of determining when a county would qualify as a Growth Zone. Nevertheless, this approach does not account for varying county size and the fact that 30 licensed FS transmit frequencies could be on a single FS path or 30 different FS paths. This could be a problem in that large counties with low FS path densities would qualify as Growth Zones and smaller counties with higher FS path densities, but not 30 frequencies, would not qualify as Growth Zones. Therefore, we seek comment on this proposal and on any alternatives that might normalize the qualification factors for Growth Zones or otherwise account for varying county sizes and deployment scenarios.

4. Rather than propose the Skybridge/FWCC suggestion that the Commission publish a public notice every 6 months with a list of counties that would qualify as Growth Zones, we propose to make the determination of whether an area qualifies as a Growth Zone a case-by-case function of the frequency coordination process. We find that making and publishing Growth Zone determinations every six months is unnecessary because this information can easily be handled as part of the coordination process for a new NGSO FSS gateway earth station. This approach would also provide ‘near real-time’ currency to the process. We seek comment on this proposal and any alternatives.
5. We also propose to adopt the conditions (see (a) through (c) in paragraph 9 in the NPRM, on NGSO FSS deployment set forth in the SkyBridge/FWCC Growth Zone Proposal. These conditions would ensure: (1) That the coordination process protects the potential for FS growth throughout the allocated band, even though FS licenses would continue to be authorized for specific frequencies on an as needed basis; (2) that NGSO FSS licensees accepting a certain level of interference along a given azimuth from incumbent FS licensees will accept the same level of impact from future FS applicants; and (3) that coordination only considers the particular technical characteristics of the NGSO FSS gateway earth station being deployed without considering “look angles” to the satellites that will not be used. We seek comment on whether these conditions should apply only to NGSO FSS gateway earth stations located within a Growth Zone, or whether they should also apply to those in proximity to, or within a certain distance of, a Growth Zone, and, if so, what the proximity criteria or distance should be. We also seek comment on whether these conditions should apply only to the protection of FS stations located within the Growth Zone in which the NGSO FSS earth station is located, or whether they should also apply to the protection of other FS stations located outside that Growth Zone but within the coordination contour of the earth station. Further, we seek comment on whether the level of impact from future FS applicants expressed in the proposal as an aggregate level of interference from any FS stations (see (c) in paragraph 9 of the NPRM, should apply case-by-case to individual transmit frequencies, to the aggregate of transmit frequencies operating on a single transmit path from a station, or to all frequencies on all transmit paths from a station. We seek comment on whether these conditions are appropriate to ensure equitable sharing. We also seek comment on whether other conditions or changed coordination procedures would be appropriate to address sharing between these services.

B. Coordination Between FSS and BAS/CARS Operations at 7 GHz and 13 GHz

6. Proposal. We acknowledge that frequency coordination and spectrum sharing between FSS and BAS/CARS fixed and mobile operations will be challenging. Nevertheless, we believe that spectrum sharing between FSS earth stations (both GSO and NGSO) and BAS/CARS fixed and mobile operations is feasible because the number of new FSS earth stations should be relatively small. We find that there are several factors that affect how fixed, mobile, and fixed-satellite services will share the 7 GHz and 13 GHz bands. For example, mobile BAS/CARS operations, which may include aeronautical operations, require a great deal of deployment flexibility to cover news or events when and where they happen, whereas fixed BAS/CARS and FSS operations are stationary and often have high requirements for reliability. Further, the interference protection expectations of mobile BAS/CARS operations, which may rely upon informal ad hoc coordination, would likely be different than those of fixed BAS/CARS and FSS operations, which coordinate their use prior to authorization to ensure reliable communications. Therefore, we address separately mobile and fixed BAS and CARS coordination with FSS for the 7 GHz and 13 GHz bands.

7. Coordination of FSS with Mobile BAS and CARS operations. We propose to maintain the existing coordination requirements for both FSS and mobile BAS and CARS operations in the 7 GHz and 13 GHz bands, rather than propose to require that all operations in the bands follow the same coordination procedures. Thus, NGSO and GSO FSS operators seeking to deploy new earth stations in these bands would continue to initiate coordination with mobile BAS and CARS operations using the coordination procedures in §§ 25.203, 25.251 and 101.103(d). Similarly, new mobile BAS/CARS operators initiating coordination in the 7 GHz and 13 GHz bands would continue to have the flexibility to use either the informal ad hoc local coordination procedures in §§ 74.638 and 78.36 or the coordination procedures in § 101.103(d) to coordinate with FSS earth stations.

8. We first address the coordination procedures that an FSS entity would use when it initiates coordination for a new earth station. At the outset, pursuant to §§ 25.203(b) and 25.251, the FSS entity needs to identify the coordination distance contour for the earth station. Based on the technical criteria contained in ITU Appendix 7 and certain ITU Recommendations, these technical criteria address protection of mobile as well as terrestrial fixed facilities, and thus, we believe, contain sufficient technical rigor to enable identification and protection of mobile TVPU stations. In this context, however, we note that the maximum coordination distances and coordination contours calculated using ITU Appendix 7 are conservatively large, particularly for sharing between an NGSO FSS earth station and aeronautical TVPU stations. Considering the relative brevity of TVPU operations, particularly for worst-case pointing by either an earth station or a mobile antenna, we seek comment on whether these distances should be changed with a view toward reducing the overall coordination burden where the potential for interference is minimal. Parties favoring reducing the coordination distances should support alternative distances with appropriate engineering analysis.

9. Regarding the administrative aspects of coordination for FSS earth stations, our parts 25 and 101 rules require notification to all potentially affected licensees and applicants within the ITU Appendix 7 coordination distance contour for the earth station. We note that the rules give applicants the flexibility to determine how best to identify facilities that may affect or be affected by the proposed facilities, and licensees who must be notified. Thus, in addition to thoroughly checking relevant Commission and any other licensing databases to assess both local and nationwide licensees that may have operations in the affected area, the FSS earth station applicant should also find it useful to contact local broadcast frequency coordinators, where they exist, to help identify the licensees with operations within the coordination contour of the FSS earth station, that need to be notified. Once notification is initiated, any responses from affected parties indicating potential interference must specify the technical details in writing, and all parties must make every reasonable effort to eliminate all technical problems and conflicts. Further, if no response is received within the 30 day period, the applicant will be deemed to have made reasonable efforts to coordinate and may file its application. We believe that this process will meet the needs of both the new FSS applicants and the BAS/CARS incumbents, who can identify and provide full technical details of the facilities that may interfere with the proposed earth station: facilities requiring protection, including fixed receiver sites; aeronautical TVPU operations; and mobile patterns of use. Because BAS/CARS stations and FSS earth stations have co-primary allocations in these bands, new FSS entrants must protect all incumbent BAS/CARS operations. Therefore, new FSS entrants in the 7 GHz and 13 GHz bands must consider typical deployments of TVPU operations within their authorized area to ensure that existing TVPU uses and operations are not adversely affected.
oversight. Since the number of earth
unnecessary burdens and regulatory
and FSS operations without
protection between BAS/CARS mobile
operations and should offer sufficient
procedures have been adequate to
new mobile BAS/CARS station with
when they initiate coordination for a
CARS entities flexibility to use either
13 GHz bands as the number of earth
the sharing scenarios in the 7 GHz and
R&O
the three FSS downlink earth stations
process proposed above should be made
to account for the technical and
operational differences between NGSO
FSS and GSO FSS earth stations.
11. We also believe the existing
coordination procedures provide
sufficient flexibility for the parties to
agree to reduce the likelihood of
interference by shielding the earth
station, particularly in satellite
downlink bands, or constraining
operations by various means. We note
that these coordination procedures have
been used successfully in coordinating
the three FSS downlink earth stations
grandfathered by the MSS Feeder Link
R&O with mobile BAS/CARS TVPU
stations in the 7025–7075 MHz band.
They have also been successfully used
to coordinate FSS uplink earth stations
with mobile BAS/CARS TVPU stations
in the 12 GHz band. While we believe
existing parts 25 and 101 coordination
procedures are adequate to ensure that
new FSS earth stations are deployed
without interference with mobile BAS
and CARS operations, we seek comment
on the conclusions and proposals, and
whether any additional steps or rule
modifications are necessary to address
the sharing scenarios in the 7 GHz and
13 GHz bands as the number of earth
stations and BAS/CARS deployments
increase.
12. We propose to allow BAS and
CARS entities flexibility to use either
the informal ad hoc coordination
process in §§ 74.638 and 78.36 or the
coordination procedures in § 101.103(d)
when they initiate coordination for a
new mobile BAS/CARS station with
FSS earth stations in the 7 GHz and 13
GHz bands. These coordination
procedures have been adequate to
address sharing with BAS/CARS fixed
operations and should offer sufficient
protection between BAS/CARS mobile
and FSS operations without
unnecessary burdens and regulatory
oversight. Since the number of earth
stations in these bands should be few
and readily identifiable through the
Commission’s files, BAS and CARS
entities should have little difficulty in
notifying the appropriate FSS entity for
coordination purposes. We observe that
our rules give BAS and CARS applicants
the flexibility to determine how best to
contact the parties they identify for
coordination and thus we believe that
these rules do not need to be modified
in this regard. Because FSS has a co-
primary allocation in these bands, new
BAS and CARS entrants must protect all
authorized FSS operations.
13. We recognize the ad hoc
coordination process relies on mutual
interest, cooperation, and informal
negotiations among licensees. It is less
burdensome to the parties and affords
mobile services maximum flexibility
with regard to deployment. We believe
this an important factor for TVPU
operations where it is not possible to
predict where breaking news may
happen. On the other hand, we also
recognize that the more formal
frequency coordination procedures in
parts 25 and 101 would likely provide
FSS operations with additional certainty
of protection from TVPU operations. We
seek comment on our proposal to allow
BAS and CARS entities the flexibility to
use either the ad hoc coordination
process in §§ 74.638 and 78.36 or the
coordination procedures in § 101.103(d).
Commenters should address whether this
approach is the best means to
maintain flexibility for mobile TVPU
operations and to provide adequate
protection to NGSO FSS earth stations.
We also seek comment on any other
alternatives to our existing coordination
rules for FSS and BAS/CARS mobile
operations. Finally, we seek comment
from small businesses or other small
entities concerning the alternatives
proposed.
14. In the BAS/CARS R&O, the
Commission recently declined to
expand the BAS short-term frequency
coordination procedure to include a
two-way notification/response
coordination procedure for short-term
use with respect to FSS earth stations
operations. The Commission stated that
all short-term operation is secondary,
and that the existing Section 74.24(g)
requirement to notify the local
coordinating committee or co-channel
licensees is sufficient to ensure short-
term deployments have a minimal
chance of causing harmful interference
while providing broadcasters the ability
to cover newsworthy events without
delay. We thus propose to maintain the
short-term coordination status of BAS
short-term itinerant TVPU
operations vis-a-vis primary FSS
operations in the 7 GHz and 13 GHz
bands. In this connection, we remind
BAS short-term operators that they are
responsible for ensuring notification to
any co-channel FSS earth station within
whose coordination contour a
prospective short-term deployment is
contemplated, whether notification is
effectuated through a local frequency
coordinator or directly with the FSS
earth station. We also propose to require
CARS short-term operators to notify
either the local frequency coordinator
or co-channel licensees, including
licensees of FSS earth stations, and
provide the name and telephone
number of a person who may be
contacted in the event of interference,
except where it is impractical, similar to
the BAS notification requirements. We
believe this action will provide more
certainty to licensed fixed, mobile, and
particularly earth station operations
without burdening CARS short-term
itinerant operations. In this connection,
we seek comment on whether the status
of CARS short-term operations should
be on a secondary, non-interference
basis, similar to BAS short-term
operations. Because short-term itinerant
TVPU operations would be susceptible
to interference if they deploy near FSS
uplink earth stations, they would benefit
by coordinating their use to avoid such
deployment. Moreover, we encourage all
parties to a coordination to
cooperate in resolving any potential
interference concerns regarding a
prospective short-term operation. We
believe that the short-term operation
procedures, could be used by the short-
term TVPU operators to address
potential interference scenarios. Under
these procedures, the short-term
itinerant TVPU operators will likely
contact either the local frequency
coordinators or co-channel BAS/CARS
licensees, who likely have been
involved in FSS earth station
 coordinations and are aware of any
existing FSS earth station in an area.
Further, we do not believe there will be
large areas where short-term itinerant
operations would be precluded by FSS
earth stations because the number of
these earth stations should be limited.
We seek comment on these proposals
and whether other coordination steps
would be necessary to address FSS
sharing with short-term itinerant
operations. For example, should FSS
licensees maintain a point of contact to
facilitate frequency engineering for
short-term itinerant deployments to
cover unplanned events? This point of
contact should also afford a method for
rapid information exchange and thereby
facilitate both the continued viability of

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short-term itinerant deployments and the protection of FSS operations. Alternatively, absent any coordination, FSS entities could take precautions to protect downlink earth stations from interference from short-term itinerant TVPU operations.

15. In connection with the use of parts 25 and 101 coordination procedures for the coordination of FSS earth stations with mobile stations in the 7 GHz and 13 GHz bands, we note that the interference protection criteria in § 101.105(a), (b), and (c) for FS, and referenced by §§ 74.638 and 78.36, respectively, for BAS and CARS, specifically address the protection of fixed stations, but not mobile stations. We seek comment on whether those rules should be amended to apply specifically to mobile as well as fixed stations, whether they should be supplemented to include criteria unique to the protection on mobile and fixed receivers used in conjunction with mobile stations, and what the additional criteria should be. Commenters recommend additional criteria, such as the baseline interference and threshold degradation figures in §§ 101.105(a) and (b) or the conservative default criteria in § 101.105(c)(2), should support their proposals with engineering showings.

We believe the approaches described for coordinating FSS (both NGSO and GSO) and BAS/CARS mobile operations achieve a viable balance between the needs of FSS licensees for certainty and reliability and the needs of BAS/CARS for flexibility. We seek comment on these findings and proposals, as well as any modifications to the above procedures that would enhance the good faith and speed of participants or otherwise improve or streamline the process without compromising our goals.

17. Coordination of FSS and Fixed BAS and CARS Operations: In both ET Docket No. 98–142 and ET Docket No. 98–206, the Commission stated its belief that parts 25 and 101 coordination procedures could protect both NGSO FSS earth stations and fixed BAS/CARS stations, but deferred adoption of those procedures to this proceeding. We propose to maintain the coordination procedures in §§ 25.203 and 25.251 for coordination of new FSS earth stations with fixed BAS/CARS stations in the 7 GHz and 13 GHz bands, and to adopt the coordination procedures set forth in §§ 101.21(f) and 101.103(d) for coordination of new fixed BAS and CARS stations with FSS earth stations, whether NGSO or GSO. These procedures and the ITU Appendix 7 technical criteria referenced by them have proven successful in coordinating FS facilities governed by part 101 with FSS earth stations. Fixed BAS and CARS facilities under part 74 and part 78 are similar, if not identical, to the part 101 FS facilities in frequency, technical characteristics, limitations, and use, and thus should be able to follow the same technical criteria for coordination purposes. We believe that the same coordination procedures should be used for coordinating fixed BAS and CARS with FSS in the 7 GHz and 13 GHz bands, as currently used for coordinating fixed FS with FSS in the nearby 6525–6875 MHz and 10 GHz bands. We favor using uniform coordination procedures for similar services to simplify our rules and the frequency coordination process. Therefore, we propose to amend §§ 74.638 and 78.36 to reference §§ 101.21(f) and 101.103(d) for coordinating fixed BAS/CARS facilities with FSS earth stations where the prospective fixed facilities are within the coordination contour of the FSS earth station, as defined in the ITU Appendix 7. We seek comment on this proposal. We also seek comment on whether any additional measures are needed, or any additional information should be exchanged, to ensure the efficacy of these coordination procedures for fixed BAS and CARS facilities.

18. We also propose that the FS interference protection criteria in § 101.105(a), (b), and (c) apply to the protection of fixed BAS and CARS receivers and that new FSS earth stations use this criteria when coordinating with incumbent fixed BAS and CARS operations. We believe use of these criteria will be as successful for protecting fixed BAS and CARS receivers as they have proven to be for FS receivers. We seek comment on these conclusions and proposals.

Initial Regulatory Flexibility Analysis

19. As required by the Regulatory Flexibility Act (“RFA”), the Commission has prepared this Initial Regulatory Flexibility Analysis (“IRFA”) of the possible significant economic impact on small entities by the policies and rules proposed in this NPRM of Proposed Rulemaking (“NPRM”). 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. The Commission will send a copy of the NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration. See 5 U.S.C. 603(a). In addition, the NPRM and IRFA (or summaries thereof) will be published in the Federal Register.

Need for, and Objectives of, the Proposed Rules

20. By this action (NPRM), we propose to modify our frequency coordination rules to coordinate sharing between non-geostationary satellite orbit (NGSO) and geostationary satellite orbit (GSO) fixed-satellite service (FSS) operations and various terrestrial services operating in several frequency bands. Specifically, we consider a joint proposal by SkyBridge L.L.C. and the Fixed Wireless Communications Coalition (Skybridge/FWCC Growth Zone Proposal) to supplement our existing coordination procedures to promote sharing between new NGSO FSS space-to-Earth (downlink) operations and existing Fixed Service (FS) operations in the 10.7–11.7 GHz (10 GHz) band. We also set forth proposals for amending our frequency coordination rules to address situations where NGSO FSS and GSO FSS operations share spectrum with terrestrial operations in the FS, Broadcast Auxiliary Service (BAS) and Cable Television Relay Service (CARS) in various bands. Specifically, we:

• Propose to apply the principles of the Skybridge/FWCC Growth Zone Proposal to our coordination rules for NGSO FSS downlink operations sharing with FS operations in the 10 GHz band;
• Propose to apply the existing parts 25 and 101 coordination rules for coordination of new FSS (both NGSO and GSO) earth stations with mobile BAS/CARS operations in the 6875–7075 MHz (7 GHz) and 12750–13250 MHz (13 GHz) bands, and consider whether any additions or modifications to the rules are needed to address the operating characteristics of mobile services;
• Propose to allow either the parts 74 and 78 informal coordination rules or the part 101 coordination rules to be used for the coordination of mobile BAS/CARS operations with FSS
(both NGSO and GSO) earth stations, in the 7 GHz and 13 GHz bands, and consider whether any additions or modifications of these rules are needed; and,

- Propose to apply the existing parts 25 and 101 coordination rules for sharing between new NGSO FSS earth stations and fixed BAS/CARS operations in the 7 GHz and 13 GHz bands.

We undertake this proceeding to facilitate the introduction of new satellite and terrestrial services while promoting interference protection among the various users in these bands.

Legal Basis

21. The proposed action is authorized under sections 4(i), 7(a), 303(c), 303(l), 303(g), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 157(a), 303(c), 303(f), 303(g), and 303(r).

Description and Estimate of the Number of Small Entities to Which the Proposed Rules May Apply

22. 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”). A small organization is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.” Nationwide, as of 1992, there were approximately 275,001 small organizations. The term “small governmental jurisdiction” is defined as “governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.” As of 1997, there were about 87,453 governmental jurisdictions in the United States. This number includes 39,044 county governments, municipalities, and townships, of which 37,546 (approximately 96.2%) have populations of fewer than 50,000, and of which 1,498 have populations of 50,000 or more. Thus we estimate the number of small governmental jurisdictions overall to be 84,098 or fewer. 23. Regarding incumbent cable television operations in the affected bands, the SBA has developed a small business size standard for Cable and Other Program Distribution, which consists of all such firms having $12.5 million or less in annual receipts. This category includes cable systems operators, closed circuit television services, direct broadcast satellite services, multipoint distribution systems, satellite master antenna systems, and subscription television services. According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year. Of this total, 1,180 firms had annual receipts of under $10 million and an additional 52 firms had receipts of $10 million or more but less than $25 million. Consequently, the Commission estimates that the majority of providers in this service category are small businesses that may be affected by the rules and policies adopted herein.

24. In addition, the Commission has developed its own small business size standard for cable system operators, for purposes of rate regulation. Under the Commission’s rules, a “small cable company” includes cable systems that, directly or through an affiliate, do not exceed $250 million in the aggregate. Based on available data, the Commission estimates that the number of cable operators serving 677,000 subscribers or fewer, totals 1,450. The Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed $250 million, and therefore are unable, at this time, to estimate more accurately the number of cable system operators that would qualify as small cable operators under the size standard contained in the Communications Act of 1934.

25. Further, the Communications Act of 1934, as amended, also contains a size standard for small cable system operators, which is “a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed $250,000,000.” The Commission has determined that there are 67,700,000 subscribers in the United States. Therefore, an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed $250 million in the aggregate.

26. Regarding incumbent GSO FSS satellite use and the proposed NGSO FSS use in these requested bands, the Commission has not developed a definition of small entities specifically directed toward geostationary or non-geostationary orbit fixed-satellite service applicants or licensees. The SBA has developed a size standard for a small business within the category of Satellite Telecommunications. Under that SBA size standard, such a business is small if it has $12.5 million or less in average

over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, the Commission estimates that there are now fewer than 1,439 small entity cable system operators that may be affected by the rules and policies adopted in the NPRM.
annual receipts.\textsuperscript{19} According to Census Bureau data for 1997, in this category there was a total of 324 firms that operated for the entire year.\textsuperscript{20} Of this total, 273 firms had annual receipts of under $10 million, and an additional twenty-four firms had receipts of $10 million to $24,999,999.\textsuperscript{21} Thus, under this size standard, the majority of firms can be considered small. Generally, these NGSO and GSO FSS systems cost several millions of dollars to construct and operate. Therefore the NGSO and GSO FSS companies, or their parent companies, rarely qualify under this definition as a small entity.

27. Auxiliary, Special Broadcast and other program distribution services involve a variety of transmitters, generally used to relay broadcast programming to the public (through translator and booster stations) or within the program distribution chain (from a remote news-gathering unit back to the station). The Commission has not developed a definition of small entities specific to broadcast auxiliary licensees. The U.S. Small Business Administration (SBA) has developed small business size standards, as follows: (1) For TV BAS, we will use the size standard for Television Broadcasting,\textsuperscript{infra};\textsuperscript{22} (2) For Aural BAS, we will use the size standard for Radio Stations,\textsuperscript{infra};\textsuperscript{23} (3) For Remote Pickup BAS we will use the small business size standard for Television Broadcasting when used by a TV station and that for Radio Stations when used by such a station.

28. The SBA has developed a small business size standard for television broadcasting, which consists of all such firms having $12 million or less in annual receipts.\textsuperscript{24} Business concerns included in this industry are those "primarily engaged in broadcasting aural programs by radio to the public."\textsuperscript{25} According to Commission staff review of BIA Publications, Inc. Master Access Television Analyzer Database as of May 16, 2003, about 814 of the 1,220 commercial television stations in the United States had revenues of $12 million or less. We note, however, that, in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations\textsuperscript{26} must be included.\textsuperscript{27} Our estimate, therefore, likely overstates the number of small entities that might be affected by our action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. There are also 2,127 low power television stations (LPTV).\textsuperscript{28} Given the nature of this service, we will presume that all LPTV licensees qualify as small entities under the SBA size standard.

29. The SBA has developed a small business size standard for Radio Stations, which consists of all such firms having $6 million or less in annual receipts.\textsuperscript{29} Business concerns included in this industry are those "primarily engaged in broadcasting aural programs by radio to the public."\textsuperscript{30} According to Commission staff review of BIA Publications, Inc. Master Access Television Analyzer Database, as of May 16, 2003, about 10,427 of the 10,945 commercial radio stations in the United States had revenue of $6 million or less. We note, however, that many radio stations are affiliated with much larger corporations with much higher revenue, and, that in assessing whether a business concern qualifies as small under the above definition, such business (control) affiliations\textsuperscript{31} are included.\textsuperscript{32} Our estimate, therefore, likely overstates the number of small businesses that might be affected by our action.

30. We believe, however, that most, if not all, of the auxiliary facilities could be classified as small businesses by themselves. We also recognize that most translators and boosters are owned by a parent station which, in some cases, would be covered by the revenue definition of small business entity discussed above.

31. Incumbent microwave services in the 7 GHz, 10 GHz, and 13 GHz bands include common carrier, private operational fixed, and BAS services. Presently there may be up to 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The SBA has developed a small business size standard for Cellular and other Wireless Telecommunications, which consists of all such companies having 1,500 or fewer employees.\textsuperscript{33} According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.\textsuperscript{34} Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 had employment of 1,000 employees or more.\textsuperscript{35} Thus, under this standard, the majority of firms can be considered small. We estimate, for this purpose, that all of the Fixed Microwave licensees (excluding broadcast auxiliary licensees) would qualify as small entities under the SBA definition for radiotelephone companies.

Descriptive Projected Reporting, Recordkeeping, and Other Compliance Requirements

32. We propose changes to the part 74, 78, and 101 rules governing coordination between NGSO FSS and other terrestrial services. Specifically, certain obligations will be imposed on NGSO FSS licensees in order to protect potential growth opportunities for terrestrial services in the 10 GHz band, and proposed coordination rules will govern the use of shared frequencies between FSS and BAS/CARS terrestrial determining the concern’s size." 13 CFR 121.103(a)(4).
services in the 7 and 13 GHz bands. As noted in the section entitled “Need for, and Objectives of, the Proposed Rules”, supra, in the 7 and 13 GHz bands, we are applying existing parts 25 and 101 coordination rules for coordination of new FSS earth stations with mobile BAS/CARS operations; allowing either existing part 74/78 ad hoc coordination rules or part 101 coordination rules for coordination of new BAS/CARS mobile operations with FSS earth stations; and applying existing parts 25 and 101 coordination rules for coordination of new FSS earth stations and 101 coordination rules for bands, we are applying existing parts 25 Rules for, and Objectives of, the Proposed

As noted in the section entitled

BAS, CARS, and NGSO FSS services

Impacting other services

BAS, CARS, and NGSO FSS services

Assurance that future terrestrial links

Permit FS small entities some level of

Further, to promote system growth for

many of which qualify as small entities.

Step 3. The RFA requires an agency to
describe any significant, specifically
small business, 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 and reporting requirements
under the rule for such 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 such small entities.”

34. We propose to adopt or seek
comment on adequate spectrum sharing
criteria to minimize the potential for
interference of these new NGSO FSS
operations on incumbent operations,
many of which qualify as small entities.

Further, to promote system growth for
the fixed microwave service, we are
proposing to establish obligations on
NGSO FSS licensees to ensure flexible
growth potential. This proposal should
permit FS small entities some level of
assurance that future terrestrial links
can be established without hindrance
from NGSO FSS earth stations. Further,
our coordination rules will ensure that
BAS, CARS, and NGSO FSS services
can operate sharing these bands without
impacting other services’ operations. We
also note that, in the Discussion Section
of the Notice, we have requested
comment from small businesses and
other small entities concerning the
alternatives proposed for our

30 See Notice ¶ 11–14, supra. See list of obligations at NPRM ¶ 9, supra.
31 See Notice ¶ 22, 34, supra.
33 See NPRM ¶ 28, supra.

fixed service growth zone. A fixed
service (FS) growth zone is any county
in which at least 30 FS frequencies are
licensed to transmit in the 10.7–11.7
GHz band. Growth zone determinations
shall be made at the time of submission
of a request for coordination of the
NGSO FSS gateway earth station to a
frequency coordinator and shall be a
component of the coordination process
required under this part.

3. Section 25.203 is amended by
adding paragraph (l) to read as follows:

§ 25.203 Choice of sites and frequencies.

(l) NGSO FSS gateway earth stations
operating in the 10.7–11.7 GHz band
may be located in a fixed service (FS)
growth zone, as defined by § 25.201 and
recognized during the gateway earth
station’s coordination process pursuant
to its license application, subject to the
following conditions:

(1) The NGSO FSS gateway earth
station located in the FS growth zone
shall be in accordance with standard
coordination procedures, except that
coordination shall assume that all FS
stations relevant to the coordination are
operating on all FS transmit frequencies
in the 10.7–11.7 GHz band; and

(2) If an FS applicant seeking to
operate a new FS station in an FS
growth zone would be precluded, under
the standard coordination procedures, at
a particular location in the band due to
the existence of the gateway earth
station, the gateway earth station
licensee shall, at the FS applicant’s
request, be responsible for reducing the
effect on the gateway earth station of the
power radiated by the proposed FS
station to the greatest extent practicable,
consistent with sound engineering
practices and in a manner that does not
materially degrade the operational
capabilities of the gateway earth station,
up to a maximum of 20 dB below the
interference level derived from the free-
space coordination calculation; and

(3) In order to locate an NGSO FSS
gateway earth station at a particular site
within an FS growth zone that
otherwise would not be acceptable
under the standard coordination
procedures, an NGSO FSS gateway earth
station applicant may voluntarily agree
to accept, from a specified azimuth, a
certain level of interference from a
particular FS station in excess of the
level that would be consistent with the
standard coordination procedures. To
the extent that an NGSO FSS gateway
earth station is sited pursuant to this
subsection, the licensee shall in the
future be obligated to continue to
accept, from that specified azimuth, that
same aggregate level of interference from any FS stations; and

(4) In coordinating a new FS station with an NGSO FSS gateway earth station located in an FS growth zone, the coordination shall not take into account NGSO FSS gateway earth station antenna elevation angles below the lowest geometric elevation angle that can be employed by the NGSO FSS gateway earth station for each direction of azimuth, taking into account the specific characteristics of the relevant satellite constellation; and

(5) If, at the time of submission of a request for coordination of a particular NGSO FSS gateway earth station site to a frequency coordinator, that site is located outside of any FS growth zone, any NGSO FSS gateway earth station facility subsequently licensed to operate at that site shall not be subject to the provisions of paragraphs (l)(1) through (4) of this section, regardless of whether the county in which that site is located subsequently becomes an FS growth zone.

PART 74—EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCAST AND OTHER PROGRAM DISTRIBUTION SERVICES

4. The authority citation for part 74 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 307, 336(f), 336(h) and 554.

5. Section 74.638 is amended by revising paragraphs (a), (b), (c) introductory text, and paragraph (d) to read as follows:

§ 74.638 Frequency coordination.

(a) Coordination of all frequency assignments for fixed stations in all bands above 2110 MHz, and for mobile (temporary fixed) stations in the bands 6425–6525 MHz and 17.7–19.7 GHz, will be in accordance with the procedure established in paragraph (d) of this section. Coordination of all frequency assignments for all mobile (temporary fixed) stations in the band 1990–2110 MHz will be conducted in accordance with the procedure in paragraph (d) of this section.

(b) For each frequency coordinated under this paragraph, the interference protection criteria in § 101.105(a), (b), and (c) of this chapter and the frequency usage coordination procedures in § 101.103(d) of this chapter will apply. Coordination must be completed orally and the period notification may be less than 30 days if the parties agree. Coordination of all frequency assignments for mobile (temporary fixed) assignments for fixed stations in all bands above 2110 MHz, except the bands 6425–6525 MHz and 17.7–19.7 GHz, will be in accordance with the procedure established in paragraph (b) of this section, except that the prior coordination process for mobile (temporary fixed) assignments may be completed orally and the period allowed for response to a coordination notification may be less than 30 days if the parties agree. Coordination of all frequency assignments for all mobile (temporary fixed) stations in all bands above 2110 MHz, except the bands 6425–6525 MHz and 17.7–19.7 GHz, will be conducted in accordance with the procedure established in paragraph (b) of this section or with the procedure in paragraph (d) of this section.

(c) Coordination of all frequency assignments for all fixed stations in the band 1990–2110 MHz will be in accordance with the procedure established in paragraph (c) of this section. Coordination of all frequency assignments for all mobile (temporary fixed) stations in the band 1990–2110 MHz will be in accordance with the procedure in paragraph (d) of this section.

(d) For each frequency coordinated under this paragraph, applicants are responsible for selecting the frequency assignments that are least likely to result in mutual interference with other licensees in the same area. Applicants may consult local frequency coordination committees, where they exist, for information on frequencies available in the area. In selecting frequencies, consideration should be given to the relative location of receive points, normal transmission paths, and the nature of the contemplated operation.

PART 78—CABLE TELEVISION RELAY SERVICE

6. The authority for part 78 continues to read as follows:


7. Section 78.11 is amended by adding a sentence to the end of paragraph (e) to read as follows:

§ 78.11 Permissible service.

(e) * * * And provided, further, that prior to such operation, the licensee shall, for the intended location or area of operation, notify the appropriate frequency coordination committee or any licensee(s) assigned the use of the proposed operating frequency, including licensees of fixed-satellite service earth stations, concerning the particulars of the intended operation, and shall provide the name and telephone number of a person who may be contacted in the event of interference, except that this notification provision shall not apply where an unexpected need for immediate short-term mobile station operation would render this notification provision impractical.

8. Section 78.36 is amended by revising paragraphs (a), (b) introductory text, (b)(1), (c) introductory text, and paragraph (d) to read as follows:

§ 78.36 Frequency coordination.

(a) Coordination of all frequency assignments for fixed stations in all bands above 2110 MHz, and for mobile (temporary fixed) stations in the bands 6425–6525 MHz and 17.7–19.7 GHz, will be in accordance with the procedure established in paragraph (b) of this section, except that the prior coordination process for mobile (temporary fixed) assignments may be completed orally and the period allowed for response to a coordination notification may be less than 30 days if the parties agree. Coordination of all frequency assignments for all mobile (temporary fixed) stations in all bands above 2110 MHz, except the bands 6425–6525 MHz and 17.7–19.7 GHz, will be conducted in accordance with the procedure established in paragraph (b) of this section or with the procedure in paragraph (d) of this section.

(b) For each frequency coordinated under this paragraph, applicants are responsible for selecting the frequency assignments that are least likely to result in mutual interference with other licensees in the same area. Applicants may consult local frequency coordination committees, where they exist, for information on frequencies available in the area. In selecting frequencies, consideration should be given to the relative location of receive points, normal transmission paths, and the nature of the contemplated operation.
in excess of permissible levels to other users. All applicants and licensees must cooperate fully and make reasonable efforts to resolve technical problems and conflicts that may inhibit the most effective and efficient use of the radio spectrum; however, the party being coordinated with is not obligated to suggest changes or re-engineer a proposal in cases involving conflicts. Applicants should make every reasonable effort to avoid blocking the growth of systems as prior coordinated. The applicant must identify in the application all entities with which the technical proposal was coordinated. In the event that technical problems are not resolved, an explanation must be submitted with the application. Where technical problems are resolved by an agreement or operating arrangement between the parties that would require special procedures be taken to reduce the likelihood of interference in excess of permissible levels (such as the use of artificial site shielding) or would result in a reduction of quality or capacity of either system, the details thereof may be contained in the application.

(c) For each frequency coordinated under this part, the following frequency usage coordination procedures will apply:

(d) For each frequency coordinated under this part, applicants are responsible for selecting the frequency assignments that are least likely to result in mutual interference with other licensees in the same area. Applicants may consult local frequency coordination committees, where they exist, for information on frequencies available in the area. In selecting frequencies, consideration should be given to the relative location of receive points, normal transmission paths, and the nature of the contemplated operation.