

and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve State choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

B. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small

Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. Section 804 exempts from section 801 the following types of rules: (1) Rules of particular applicability; (2) rules relating to agency management or personnel; and (3) rules of agency organization, procedure, or practice that do not substantially affect the rights or obligations of non-agency parties. 5 U.S.C. 804(3). EPA is not required to submit a rule report regarding today's action under section 801 because this is a rule of particular applicability establishing source-specific requirements for Prince William County Landfill located in Prince William County, Virginia.

C. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by November 8, 2004. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time

within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

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

Dated: August 26, 2004.

Richard J. Kampf,

Acting Regional Administrator, Region III.

■ 40 CFR part 52 is amended as follows:

PART 52—[AMENDED]

■ 1. The authority citation for part 52 continues to read as follows:

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

Subpart VV—Virginia

■ 2. Section 52.2420, the table in paragraph (d) is amended by adding the entry for Prince William County Landfill at the end of the table to read as follows:

§ 52.2420 Identification of plan.

* * * * *
(d) * * *

EPA-APPROVED VIRGINIA SOURCE-SPECIFIC REQUIREMENTS

Source name	Permit/order or registration number	State effective date	EPA approval date	40 CFR part 52 citation
Prince William County Landfill	Registration No. 72340	04/16/04	[Insert Federal Register page number where the document begins], 09/09/04.	52.2420(d).

[FR Doc. 04-20130 Filed 9-8-04; 8:45 am]
BILLING CODE 6560-50-P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 5, 25 and 97

[**IB Docket 02-54; FCC 04-130**]

RIN 3060-A106

Mitigation of Orbital Debris

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: The Federal Communications Commission (Commission or FCC) adopts a Second Report and Order that

amends the Commission's rules to minimize the amount of orbital debris created by satellite systems and to mitigate the effects of orbital debris on operational spacecraft. Orbital debris consists of man-made objects that are not functioning spacecraft. Although orbital debris currently poses little short-term risk to operational spacecraft, an increase in orbital debris could have a significant impact in the long term on space activities, including important satellite communications. Adoption of these rules will help preserve the United States' continued affordable access to space, the continued provision of reliable U.S. space-based services—including communications and remote sensing satellite services for U.S. commercial, government, and homeland

security purposes—as well as the continued safety of persons and property in space and on the surface of the Earth. Adoption of these rules will also further the domestic policy objective of the United States to minimize the creation of orbital debris and is consistent with international policies and initiatives to achieve this goal.

DATES: Effective October 12, 2004, except for §§ 5.63(e), 25.114(d)(14), and 97.207(g) which contain information collection requirements that are not effective until approved by the Office of Management and Budget. The FCC will publish a document in the **Federal Register** announcing the effective date for those sections. Written comments on the Paperwork Reduction Act proposed

information collection requirements must be submitted by the public, Office of Management and Budget (OMB), and other interested parties on or before November 8, 2004.

ADDRESSES: In addition to filing comments with the Office of the Secretary, a copy of any comments on the Paperwork Reduction Act information collection requirements contained herein should be submitted to Judith B. Herman, Federal Communications Commission, Room 1-C804, 445 12th Street, SW., Washington, DC 20554, or via the Internet to *Judith-B.Herman@fcc.gov*, and to Kristy L. LaLonde, OMB Desk Office, Room 10234 NEOB, 725 17th Street, NW., Washington, DC 20503, via the Internet to *Kristy.L.LaLonde@omb.eop.gov*, or via fax at 202-395-5167.

FOR FURTHER INFORMATION CONTACT: Stephen Duall, Attorney Advisor, Satellite Division, International Bureau, telephone (202) 418-1103, or via the Internet at *Stephen.Duall@fcc.gov*. For additional information concerning the Paperwork Reduction Act information collection requirements 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 Second Report and Order in IB Docket No. 02-54, FCC 04-130, adopted June 9, 2004 and released June 21, 2004. The complete text of this Second Report and Order is available for inspection and copying during normal business hours in the FCC Reference Information Center, Portals II, 445 12th Street, SW., Room CY-A257, Washington, DC 20554. This 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 at *FCC@BCPIWEB.COM*. It is also available on the Commission's Web site at *http://www.fcc.gov*.

Paperwork Reduction Act Analysis: This document contains proposed 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 (PRA) of 1995, Pub. L. 104-13. Public and agency comments are due November 8, 2004. 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 estimate; (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, Pub. L. 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." This publication and comment period supersedes the publication and comment period that was published in the **Federal Register** on July 21, 2004, 69 FR 45714.

OMB Control Number: 3060-1013.

Title: Mitigation of Orbital Debris.

Form No.: N/A.

Type of Review: Revision of a currently approved collection.

Respondents: Business or other for-profit.

Number of Respondents: 50.

Estimated Time per Response: 5 hours.

Frequency of Response: One time reporting requirement and third party requirement.

Total Annual Burden: 135 hours.

Total Annual Cost: \$36,000.

Privacy Act Impact Assessment: N/A.

Needs and Uses: The Commission is revising this information collection to reflect the new and/or modified information collection requirements that resulted from the Second Report and Order, "In the Matter of Mitigation of Orbital Debris." This Second Report and Order was released by the Commission on June 21, 2004. The Commission amended parts 5, 25, and 97 of the Commission's rules by adopting new rules concerning mitigation of orbital debris. Orbital debris consists of artificial objects orbiting the earth that are not functional spacecraft. Adoption of these rules will help preserve the United States' continued affordable access to space, the continued provision of reliable U.S. space-based services—including communications and remote sensing satellite services for U.S. commercial, government, and homeland security purposes—as well as the continued safety of persons and property in space and on the surface of the earth. Under the rules as amended today, a satellite system operator requesting FCC space station authorization, or an entity requesting a

Commission ruling for access to a non-U.S.-licensed space station under the FCC's satellite market access procedures, must submit an orbital debris mitigation plan to the Commission regarding spacecraft design and operation in connection with its request. This Second Report and Order provides guidance for the preparation of such plans. The Commission also adopted requirements concerning the post-mission disposal of Commission-licensed space stations operating in or near the two most heavily used orbital regimes, low-earth orbit (LEO), and geostationary-earth orbit (GEO). Adoption of these rules will further the domestic policy objective of the United States to minimize the creation of orbital debris and is consistent with international policies and initiatives to achieve this goal.

The information collection requirements accounted for in this collection are necessary to mitigate the potential harmful effects of orbital debris accumulation. Without such information collection requirements, the growth in the orbital debris may limit the usefulness of space for communications and other uses in the future by raising the costs and lowering the reliability of space-based systems.

Regulatory Flexibility Analysis: As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the Notice of Proposed Rulemaking in the Matter of Mitigation of Orbital Debris (Orbital Debris Notice).² The Commission sought written public comment on the proposals in the Orbital Debris Notice, including comment on the IRFA. The comments received are discussed below. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

Need for, and Objectives of, the Proposed Rules: Orbital debris consists of artificial objects orbiting the Earth that are not functional spacecraft. Since human activity in space began, there has been a steady growth in the number and total mass of orbital debris. The risks presented by orbital debris consist primarily of the risk of collisions between orbital debris and functional spacecraft, and the risk of damage to persons and property on the surface of the Earth in cases where a debris object

¹ See 5 U.S.C. 603. The RFA, *see* 5 U.S.C. 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Public Law 104-121, Title II, 110 Stat. 857 (1996).

² See Mitigation of Orbital Debris, Notice of Proposed Rulemaking, IB Docket No. 02-54, FCC 02-80, 17 FCC Rcd 5586, 5613 (2002).

³ See 5 U.S.C. 604.

survives reentry into the Earth's atmosphere. While these risks are small and are likely to remain so for the near term, continued and unmitigated growth in the orbital debris population may limit the usefulness of space—particularly high-value orbits such as low-Earth orbit (LEO)⁴ and geostationary-Earth orbit (GEO)⁵—for communications and other uses in the future, by raising the costs and lowering the reliability of space-based systems.

This Second Report and Order adopts rules to minimize the creation of orbital debris. Minimizing the creation of orbital debris will help to ensure continued affordable access to space by the United States, the continued provision of U.S. space-based communications, and the continued safety of persons and property in space and on the surface of the Earth. In addition, the adoption of orbital debris mitigation rules by the FCC furthers the long-standing policy of the United States to minimize the creation of orbital debris, and is consistent with international policies and initiatives to mitigate orbital debris.

Summary of Significant Issues Raised by Public Comments in Response to the IRFA: Two parties submitted comments that specifically responded to the IRFA. The Radio Amateur Satellite Corporation (AMSAT)⁶ contends that it and its constituent members qualify as “small entities” that must be considered in the Commission's formulation of any new rules that may be applicable to the amateur-satellite service. In addition, the University of Mississippi National Remote Sensing and Space Law Center (UM Space Law Center)⁷ proposes that, although threshold requirements for orbital debris mitigation should be set by the FCC, the orbital debris mitigation plans of small entities should be reviewed on a case-by-case basis and that small entities should be able to seek exemptions from orbital debris mitigation reporting or compliance

⁴ For purposes of the Second Report and Order, the term LEO is used to refer to the orbits at altitudes below 2,000 kilometers.

⁵ GEO is a circular orbit along the plane of the Earth's equator at an altitude of approximately 35,786 kilometers. A spacecraft in geostationary-Earth orbit can be maintained at a constant longitudinal position relative to the Earth, thus allowing the satellite to be “seen” continuously from, and at a fixed orientation to, any given point on the Earth's surface.

⁶ Comments of the Radio Amateur Satellite Corporation Regarding Initial Regulatory Flexibility Analysis, IB Docket No. 02–54 (filed July 17, 2002).

⁷ Response of the University of Mississippi National Remote Sensing and Space Law Center to Initial Regulatory Flexibility Analysis, IB Docket No. 02–54 (filed July 16, 2002).

requirements if specific reasons for the exemption can be shown.

There is no significant economic impact on AMSAT or its constituent members under the RFA. AMSAT is a non-profit scientific and educational organization that represents individuals who hold amateur radio licenses under 47 CFR 97 of the Commission's rules, and who operate or communicate with amateur space stations. Because only individuals may hold amateur licenses and amateur licensees are precluded from operating for commercial purposes, neither AMSAT nor individual amateur licensees fit the definition of small entity, as defined by the SBA.⁸ Nonetheless, the Second Report and Order has addressed the proposal of AMSAT and other commenters to exempt categorically amateur space stations from orbital debris mitigation requirements and found such proposals to be inconsistent with the purpose and object of such requirements.⁹

Furthermore, the rules adopted in the Second Report and Order are consistent with the proposals of the UM Space Law Center. Under the new rules, the elements of the orbital debris mitigation plans of all parties—not just small entities—are reviewed on a case-by-case basis in the majority of instances. Where the rules adopt rules in lieu of case-by-case review, such as for the post-mission disposal of GEO satellites, parties are permitted under existing FCC rules to seek waivers of such requirements for specific good cause shown.¹⁰ In addition, the Second Report and Order exempts, or “grandfathers,” in-orbit GEO satellites that were launched prior to the release of the Orbital Debris Notice on March 18, 2002 from the minimum post-mission disposal altitude requirements that are adopted by the Commission.¹¹ Comments indicated that the financial impact of the post-mission disposal rules for GEO spacecraft could be significant for this class of satellites in the absence of grandfathering.

Description and Estimate of the Number of Small Entities to Which the Proposed Rules May Apply: 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.¹² The RFA generally defines the term “small entity” as having the

⁸ See 5 U.S.C. 601(6) (“small entity” has same meaning as “small business” under RFA).

⁹ See *Second Report and Order* at paras. 89–92.

¹⁰ See 47 CFR 1.3.

¹¹ See *Second Report and Order* at Section III.D.4.i.

¹² 5 U.S.C. 603(b)(3).

same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”¹³ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.¹⁴ 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).¹⁵ A small organization is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”¹⁶ Nationwide, as of 1992, there were approximately 275,801 small organizations.¹⁷ “Small governmental jurisdiction” generally means “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000.”¹⁸ As of 1992, there were approximately 85,006 such jurisdictions in the United States.¹⁹ This number includes 38,978 counties, cities, and towns; of these, 37,566, or 96 percent, have populations of fewer than 50,000.²⁰ The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that 81,600 (91 percent) are small entities. Below, we further describe and estimate the number of small entity licensees that may be affected by the proposed rules, if adopted.

The rules proposed in this Second Report and Order would affect satellite operators, if adopted. The Commission has not developed a definition of small entities applicable to satellite operators. Therefore, the applicable definition of small entity is generally the definition under the SBA rules applicable to

¹³ *Id.* 601(6).

¹⁴ 5 U.S.C. 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. 632). Pursuant to the RFA, the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the **Federal Register**.” 5 U.S.C. 601(3).

¹⁵ Small Business Act, 15 U.S.C. 632 (1996).

¹⁶ 5 U.S.C. 601(4).

¹⁷ 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

¹⁸ 5 U.S.C. 601(5).

¹⁹ U.S. Dept. of Commerce, Bureau of the Census, “1992 Census of Governments.”

²⁰ *Id.*

Satellite Telecommunications.²¹ The SBA has developed a small business size standard for Satellite Telecommunications, which consists of all such firms having \$12.5 million or less in annual receipts.²² According to Census Bureau data for 1997, in this category there was a total of 324 firms that operated for the entire year.²³ Of this total, 273 firms had annual receipts of under \$10 million, and an additional twenty-four firms had receipts of \$10 million to \$24,999,999.²⁴ Thus, under this size standard, the majority of firms can be considered small.

In addition, Commission records reveal that there are approximately 240 space station operators licensed by this Commission. We do not request or collect annual revenue information, and thus are unable to estimate the number of licensees that would constitute a small business under the SBA definition. Small businesses may not have the financial ability to become space station licensees because of the high implementation costs associated with satellite systems and services.

Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements: Under the rules as amended by the Second Report and Order, a satellite system operator requesting FCC space station authorization, or an entity requesting a Commission ruling for access to a non-U.S.-licensed space station under the FCC's satellite market access procedures, must submit an orbital debris mitigation plan to the Commission regarding spacecraft design and operation in connection with its request. The Second Report and Order provides guidance for the preparation of such plans. The Second Report and Order also adopt requirements concerning the post-mission disposal of Commission-licensed space stations operating in or near the two most heavily used orbital regimes, low-Earth orbit and geostationary-Earth orbit.

As discussed below, all parties requesting Commission authorization to operate a space station or a ruling for

access to a non-U.S.-licensed space station must already demonstrate under existing FCC rules that they have the technical and legal ability to conduct such operations as a prerequisite to grant of an FCC authorization.²⁵ Because the preparation and disclosure of orbital debris mitigation plans utilizes engineering and legal resources similar to those currently used in the space station licensing process, it is expected that all parties—including small entities—will have available the resources to prepare and disclose orbital debris mitigation plans.

Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered: 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 Each is discussed in turn below.

(1) Differing compliance or reporting requirements. The Second Report and Order requires all satellite operators to disclose plans to mitigate orbital debris as part of their requests for Commission authorization. The requirement for the disclosure of orbital debris mitigation plans is not a periodic reporting requirement, but is instead triggered by submission of a request for Commission licensing or authorization, the timing of which is subject to the control of the applicant. As a result, the timetable for the disclosure can be adjusted by any applicant—including small entities—without the need for specific exemptions in the Commission's rules. Because the preparation and disclosure of orbital debris mitigation plans utilizes engineering and legal resources similar to those currently used in the licensing process, it is expected that all parties—including small entities—will have available the resources to prepare and disclose orbital debris mitigation plans. Furthermore, authorizing space station operations by small entities,

which pose the same public interest concerns as those posed by large entities, without any consideration of whether the proposed space station operations will contribute unreasonably to the creation of orbital debris would undermine the policy object of the Commission and the United States Government in mitigating orbital debris.

(2) Clarification, consolidation, or simplification of compliance or reporting requirements. The Second Report and Order clarifies, consolidates, and/or simplifies several existing compliance or reporting requirements regarding the operation of FCC-licensed space stations that will benefit all authorized space station operators, including small entities.

(3) Use of performance, rather than design, standards. The Second Report and Order establishes its debris mitigation requirements in terms of performance standards and does not adopt design standards for any class of entities, including small entities.

(4) Exemption from coverage of the rule, or any part thereof, for small entities. Authorizing space station operations by small entities, which pose the same public interest concerns as those posed by large entities, without any consideration of whether the proposed space station operations will contribute to the creation of orbital debris would undermine the policy object of the Commission and the United States Government in mitigating orbital debris. A categorical exemption from debris mitigation rules was considered in the context of amateur space station licenses—even though amateur space station licensees are not small entities as defined by the RFA—and was rejected as inconsistent with the underlying purpose of the rules.²⁷ In addition, any operator—including a small entity—is permitted under existing FCC rules to seek waivers of debris mitigation requirements for specific good cause shown.²⁸ In addition, the Second Report and Order exempts, or “grandfathers,” all in-orbit GEO satellites that were launched prior to the release of the Orbital Debris Notice on March 18, 2002 from the minimum post-mission disposal altitude requirement that are adopted by the Commission.²⁹ Comments indicated that the financial impact of the post-mission disposal rules for GEO spacecraft could be significant for this

²¹ “This industry comprises establishments primarily engaged in providing point-to-point telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.” Small Business Administration, 1997 NAICS Definitions, NAICS 513340.

²² 13 CFR 121.201, NAIC code 517410 (changed from 513340 in October 2002).

²³ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4, NAICS code 513340 (issued October 2000).

²⁴ *Id.*

²⁵ 47 CFR 25.140–146 (requiring applicants in various satellite services to demonstrate technical qualifications as a prerequisite to receiving Commission authorization for space station operations).

²⁶ 5 U.S.C. 603(c)(1)—(c)(4).

²⁷ See Second Report and Order at para. 91.

²⁸ See 47 CFR 1.3.

²⁹ See Second Report and Order at Section III.D.4.i.

class of satellites in the absence of grandfathering.

Federal Rules That May Duplicate, Overlap, or Conflict With the Proposed Rules: Remote sensing satellite systems are licensed by both the FCC and the National Oceanic and Atmospheric Administration (NOAA) of the Department of Commerce. The Second Report and Order waives disclosure requirements concerning post-mission disposal of spacecraft for remote sensing satellites when those disposal plans have been reviewed and approved by NOAA as part of its licensing process.

Report to Congress: The Commission will send a copy of the Second Report and Order, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act.³⁰ In addition, the Commission will send a copy of the Second Report and Order, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the Second Report and Order and FRFA (or summaries thereof) will also be published in the **Federal Register**.³¹

Summary of the Second Report and Order

In this Second Report and Order, the Commission amends parts 5, 25, and 97 of its rules by adopting new rules concerning mitigation of orbital debris. The Second Report and Order concludes that the Commission has authority under the Communications Act, 47 U.S.C. 151 *et seq.*, to adopt orbital debris mitigation rules.

Under the Commission's rules, as amended by the Second Report and Order, a satellite system operator requesting FCC space station authorization, or an entity requesting a Commission ruling for access to a non-U.S.-licensed space station under the FCC's satellite market access procedures, must submit an orbital debris mitigation plan to the Commission regarding spacecraft design and operation in connection with its request. Entities that have requests for such Commission authorization currently pending have 30 days after the effective date of the orbital debris disclosure rules in which to amend their requests by filing a disclosure of debris mitigation plans in a manner consistent with this Second Report and Order. The Second Report and Order also amends §§ 25.143(b), 25.145(c)(3), 25.146(i)(4), and 25.217 to eliminate previously adopted, duplicative orbital debris disclosure requirements for specific satellite services. The Commission will

announce the effective date of the elimination of these service specific disclosure requirements in a future **Federal Register** notice, which will also announce the effective date of the new orbital debris disclosure rules in §§ 5.63(e), 25.114(d)(14), and 97.207(g).

The Second Report and Order provides guidance for the preparation of debris mitigation plans. The Second Report and Order amends §§ 5.63, 25.114, and 97.207 of the Commission's rules to specify the elements of the orbital debris mitigation plans that must be addressed as part of a request for Commission authorization. As a result, mitigation plans must address elements of spacecraft design and operations so as to minimize the affect of collisions with small debris, the minimization of debris generated by accidental explosions, the selection of safe flight profiles to minimize collisions with large objects, and disposal plans for spacecraft at end of life.

The Second Report and Order amends the Commission's rules governing application filing, pre-operational maneuvers, on-orbit operations, and coordination of maneuvers. The Second Report and Order declines to adopt an orbital tolerance for NGSO spacecraft, but amends § 25.114 of the Commission's rules to require disclosure of the accuracy, if any, with which the orbital parameters of NGSO spacecraft will be maintained. It also adopts a new rule § 25.282 which authorizes GEO spacecraft to transmit in connection with short-term transitory maneuvers directly related to post-launch, orbit-raising maneuvers, provided that certain conditions are met.

The Second Report and Order also adopts a proposal to shorten and simplify the text of § 25.210(j) of the Commission's rules, which requires GEO space stations to be maintained within $\pm 0.05^\circ$ of their assigned orbital longitude, and to provide an explicit exception for certain end-of-life operations. It defers the issue of whether to extend the longitudinal tolerance of $\pm 0.05^\circ$, applicable to space stations in the fixed-satellite service, to all space stations, including mobile-satellite service (MSS) and remote sensing space stations, to a further notice of proposed rulemaking to be initiated at a later date. In addition, the Second Report and Order amends § 25.280 of the Commission's rule to clarify the timing of the notice that must be provided to the Commission once a GEO spacecraft initiates inclined orbit operations.

Furthermore, the Second Report and Order amends § 25.114 to require a more detailed discussion of how certain

satellite systems will avoid potential in-orbit collisions. These systems include those launched into a low-Earth orbit that is identical, or very similar, to an orbit used by another system, as well as a GEO system that is proposed to be collocated with other satellites at a single GEO orbital location.

The Second Report and Order adopts rules concerning the post-mission disposal of Commission-licensed spacecraft. The Commission will examine orbital debris mitigation plans of non-geostationary satellite orbit (NGSO) spacecraft, including LEO spacecraft, on a case-by-case basis in light of the U.S. Government Orbital Debris Mitigation Standard Practices (U.S. Government Standard Practices) and the orbital debris mitigation guidelines presented by the Inter-Agency Space Debris Coordination Committee (IADC Guidelines). Use of post-mission disposal methods for LEO spacecraft as set forth by the U.S. Government Standard Practices and IADC Guidelines suggest that the space station will operate consistent with the public interest. Disclosures indicating that a spacecraft will not use one of these disposal methods may necessitate the Commission to seek further information, or ultimately to condition or withhold approval. Furthermore, the Second Report and Order amends §§ 5.63, 25.114, and 97.207 to require entities proposing to dispose of spacecraft by means of atmospheric re-entry to assess the risk of human casualty from such maneuvers.

For GEO spacecraft, the Second Report and Order adopts the proposal of the Orbital Debris Notice to evaluate post-mission disposal plans according to the formula developed by the IADC Guidelines for determining the minimum perigee storage altitude for GEO spacecraft at end of life. For GEO spacecraft launched prior to the release of the Orbital Debris Notice on March 18, 2002, the Commission exempts, or "grandfathers," such spacecraft from the requirement to be relocated at end of life to a disposal orbit calculated by use of IADC formula. The Second Report and Order adopts the proposed rule that an GEO spacecraft that is disposed of at end of life according to the IADC formula may operate outside of its assigned orbital location for the purpose of such post-mission disposal, on the condition that the spacecraft's tracking, telemetry, and control transmissions are planned so as to avoid electrical interference to other satellites and are coordinated with any potentially affected satellite networks. Furthermore, the Second Report and Order requires all Commission-licensed spacecraft to

³⁰ See 5 U.S.C. 801(a)(1)(A).

³¹ See 5 U.S.C. 604(b).

ensure that all stored energy sources on board the satellite are discharged at the end of life, unless prevented by technical failures beyond their control. It also amends §§ 5.63, 25.114, and 97.207 to require disclosure of the quantity of fuel—if any—that will be reserved for post-mission disposal maneuvers of both GEO and NGSO spacecraft. New post-mission disposal requirements are codified in new § 25.283 of the Commission's rules.

The Second Report and Order clarifies that amateur, experimental, and non-U.S.-licensed spacecraft must submit the same orbital debris mitigation disclosure as U.S.-licensed spacecraft requesting authorization pursuant to part 25 of the Commission's rules. The Second Report and Order adopts the proposal not to address matters involving post-mission disposal of spacecraft that are co-licensed by the National Oceanic and Atmospheric Administration (NOAA) since such plans are already subject to effective regulatory review by NOAA. The Second Report and Order also states that the Commission does not intend to alter the current practice of not requiring information about the launch vehicle used to launch an FCC-licensed spacecraft into orbit, but the Commission retains discretion to consider orbital debris concerns involving a particular launch vehicle in the event they are raised as part of a request for a Commission authorization.

Finally, the Second Report and Order addresses liability and insurance issues related to orbital debris. It declines to adopt a rule requiring space station operator to obtain insurance to protect the United States from exposure to liability claims arising from orbital debris, but states insurance and liability issues will continue to play a role in the determination of whether approval of a particular debris mitigation plan serves the public interest, particularly when the plan involves activities, such as atmospheric re-entry, which may involve more immediate and substantial risks to persons and property on the surface of the Earth.

Ordering Clauses

Accordingly, pursuant to sections 1, 4(i), 301, 303, 308, 309, and 310 of the Communications Act of 1934, as amended, 47 U.S.C. sections 151, 154(i), 301, 303, 308, 309, and 310, this Second Report and Order in IB Docket No. 02-54 is hereby adopted.

Parts 5, 25, and 97 of the Commission's rules are amended as set forth below.

The Consumer Information Bureau, Reference Information Center, shall

send a copy of this Second Report and Order, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects in 47 CFR Parts 5, 25, and 97

Reporting and recordkeeping requirements, Satellites.

Federal Communications Commission.

Marlene H. Dortch,
Secretary.

Rule Changes

■ For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR parts 5, 25, and 97 as follows:

PART 5—EXPERIMENTAL RADIO SERVICE (OTHER THAN BROADCAST)

■ 1. The authority citation for part 5 continues to read as follows:

Authority: Secs. 4, 302, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 302, 303. Interpret or apply sec. 301, 48 Stat. 1081, as amended; 47 U.S.C. 301.

■ 2. Add paragraph (e) to § 5.63 to read as follows:

§ 5.63 Supplementary statements required.

* * * * *

(e) Except where the satellite system has already been authorized by the FCC, applicants for an experimental authorization involving a satellite system must submit a description of the design and operational strategies the satellite system will use to mitigate orbital debris, including the following information:

(1) A statement that the space station operator has assessed and limited the amount of debris released in a planned manner during normal operations, and has assessed and limited the probability of the space station becoming a source of debris by collisions with small debris or meteoroids that could cause loss of control and prevent post-mission disposal;

(2) A statement that the space station operator has assessed and limited the probability of accidental explosions during and after completion of mission operations. This statement must include a demonstration that debris generation will not result from the conversion of energy sources on board the spacecraft into energy that fragments the spacecraft. Energy sources include chemical, pressure, and kinetic energy. This demonstration should address whether stored energy will be removed at the spacecraft's end of life, by depleting residual fuel and leaving all

fuel line valves open, venting any pressurized system, leaving all batteries in a permanent discharge state, and removing any remaining source of stored energy, or through other equivalent procedures specifically disclosed in the application;

(3) A statement that the space station operator has assessed and limited the probability of the space station becoming a source of debris by collisions with large debris or other operational space stations. Where a space station will be launched into a low-Earth orbit that is identical, or very similar, to an orbit used by other space stations, the statement must include an analysis of the potential risk of collision and a description of what measures the space station operator plans to take to avoid in-orbit collisions. If the space station operator is relying on coordination with another system, the statement must indicate what steps have been taken to contact, and ascertain the likelihood of successful coordination of physical operations with, the other system. The statement must disclose the accuracy—if any—with which orbital parameters of non-geostationary satellite orbit space stations will be maintained, including apogee, perigee, inclination, and the right ascension of the ascending node(s). In the event that a system is not able to maintain orbital tolerances, *i.e.*, it lacks a propulsion system for orbital maintenance, that fact should be included in the debris mitigation disclosure. Such systems must also indicate the anticipated evolution over time of the orbit of the proposed satellite or satellites. Where a space station requests the assignment of a geostationary-Earth orbit location, it must assess whether there are any known satellites located at, or reasonably expected to be located at, the requested orbital location, or assigned in the vicinity of that location, such that the station keeping volumes of the respective satellites might overlap. If so, the statement must include a statement as to the identities of those parties and the measures that will be taken to prevent collisions;

(4) A statement detailing the post-mission disposal plans for the space station at end of life, including the quantity of fuel—if any—that will be reserved for post-mission disposal maneuvers. For geostationary-Earth orbit space stations, the statement must disclose the altitude selected for a post-mission disposal orbit and the calculations that are used in deriving the disposal altitude. The statement must also include a casualty risk assessment if planned post-mission disposal involves atmospheric re-entry

of the space station. In general, an assessment should include an estimate as to whether portions of the spacecraft will survive re-entry and reach the surface of the Earth, as well as an estimate of the resulting probability of human casualty.

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 Sections 4, 301, 302, 303, 307, 309 and 332 of the Communications Act, as amended, 47 U.S.C. Sections 154, 301, 302, 303, 307, 309 and 332, unless otherwise noted.

■ 4. Add paragraph (d)(14) to § 25.114 to read as follows:

§ 25.114 Applications for space station authorizations.

* * * * *

(d) * * *

(14) A description of the design and operational strategies that will be used to mitigate orbital debris, including the following information:

(i) A statement that the space station operator has assessed and limited the amount of debris released in a planned manner during normal operations, and has assessed and limited the probability of the space station becoming a source of debris by collisions with small debris or meteoroids that could cause loss of control and prevent post-mission disposal;

(ii) A statement that the space station operator has assessed and limited the probability of accidental explosions during and after completion of mission operations. This statement must include a demonstration that debris generation will not result from the conversion of energy sources on board the spacecraft into energy that fragments the spacecraft. Energy sources include chemical, pressure, and kinetic energy. This demonstration should address whether stored energy will be removed at the spacecraft's end of life, by depleting residual fuel and leaving all fuel line valves open, venting any pressurized system, leaving all batteries in a permanent discharge state, and removing any remaining source of stored energy, or through other equivalent procedures specifically disclosed in the application;

(iii) A statement that the space station operator has assessed and limited the probability of the space station becoming a source of debris by collisions with large debris or other operational space stations. Where a space station will be launched into a

low-Earth orbit that is identical, or very similar, to an orbit used by other space stations, the statement must include an analysis of the potential risk of collision and a description of what measures the space station operator plans to take to avoid in-orbit collisions. If the space station operator is relying on coordination with another system, the statement must indicate what steps have been taken to contact, and ascertain the likelihood of successful coordination of physical operations with, the other system. The statement must disclose the accuracy—if any—with which orbital parameters of non-geostationary satellite orbit space stations will be maintained, including apogee, perigee, inclination, and the right ascension of the ascending node(s). In the event that a system is not able to maintain orbital tolerances, *i.e.*, it lacks a propulsion system for orbital maintenance, that fact should be included in the debris mitigation disclosure. Such systems must also indicate the anticipated evolution over time of the orbit of the proposed satellite or satellites. Where a space station requests the assignment of a geostationary-Earth orbit location, it must assess whether there are any known satellites located at, or reasonably expected to be located at, the requested orbital location, or assigned in the vicinity of that location, such that the station keeping volumes of the respective satellites might overlap. If so, the statement must include a statement as to the identities of those parties and the measures that will be taken to prevent collisions;

(iv) A statement detailing the post-mission disposal plans for the space station at end of life, including the quantity of fuel—if any—that will be reserved for post-mission disposal maneuvers. For geostationary-Earth orbit space stations, the statement must disclose the altitude selected for a post-mission disposal orbit and the calculations that are used in deriving the disposal altitude. The statement must also include a casualty risk assessment if planned post-mission disposal involves atmospheric re-entry of the space station. In general, an assessment should include an estimate as to whether portions of the spacecraft will survive re-entry and reach the surface of the Earth, as well as an estimate of the resulting probability of human casualty.

* * * * *

■ 5. Revise § 25.210(j) to read as follows:

§ 25.210 Technical requirements for space stations in the Fixed-Satellite Service.

* * * * *

(j) Space stations operated in the geostationary satellite orbit must be maintained within 0.05° of their assigned orbital longitude in the east/west direction, unless specifically authorized by the Commission to operate with a different longitudinal tolerance, and except as provided in Section 25.283(b) (End-of-life Disposal).

* * * * *

■ 6. Revise § 25.280 to read as follows:

§ 25.280 Inclined orbit operations.

(a) Satellite operators may commence operation in inclined orbit mode without obtaining prior Commission authorization provided that the Commission is notified by letter within 30 days after the last north-south station keeping maneuver. The notification shall include:

- (1) The operator's name;
- (2) The date of commencement of inclined orbit operation;
- (3) The initial inclination;
- (4) The rate of change in inclination per year; and

(5) The expected end-of-life of the satellite accounting for inclined orbit operation, and the maneuvers specified under § 25.283 of the Commission's rules.

(b) Licensees operating in inclined-orbit are required to:

- (1) Periodically correct the satellite attitude to achieve a stationary spacecraft antenna pattern on the surface of the Earth and centered on the satellite's designated service area;
- (2) Control all electrical interference to adjacent satellites, as a result of operating in an inclined orbit, to levels not to exceed that which would be caused by the satellite operating without an inclined orbit;
- (3) Not claim protection in excess of the protection that would be received by the satellite network operating without an inclined orbit; and

(4) Continue to maintain the space station at the authorized longitude orbital location in the geostationary satellite arc with the appropriate east-west station-keeping tolerance.

■ 7. Add § 25.282 to subpart D to read as follows:

§ 25.282 Orbit raising maneuvers.

A space station authorized to operate in the geostationary satellite orbit under this part is also authorized to transmit in connection with short-term, transitory maneuvers directly related to post-launch, orbit-raising maneuvers, provided that the following conditions are met:

- (a) Authority is limited to those tracking, telemetry, and control

frequencies in which the space station is authorized to operate once it reaches its assigned geostationary orbital location;

(b) In the event that any unacceptable interference does occur, the space station licensee shall cease operations until the issue is rectified;

(c) The space station licensee is required to accept interference from any lawfully operating satellite network or radio communication system.

■ 8. Add § 25.283 to subpart D to read as follows:

§ 25.283 End-of-life disposal.

(a) *Geostationary orbit space stations.* Unless otherwise explicitly specified in an authorization, a space station authorized to operate in the geostationary satellite orbit under this part shall be relocated, at the end of its useful life, barring catastrophic failure of satellite components, to an orbit with a perigee with an altitude of no less than:

$$36,021 \text{ km} + (1000 \cdot C_R \cdot A/m)$$

where C_R is the solar pressure radiation coefficient of the spacecraft, and A/m is the Area to mass ratio, in square meters per kilogram, of the spacecraft.

(b) A space station authorized to operate in the geostationary satellite orbit under this part may operate using its authorized tracking, telemetry and control frequencies, and outside of its assigned orbital location, for the purpose of removing the satellite from the geostationary satellite orbit at the end of its useful life, provided that the conditions of paragraph (a) of this section are met, and on the condition that the space station's tracking, telemetry and control transmissions are planned so as to avoid electrical interference to other space stations, and coordinated with any potentially affected satellite networks.

(c) *All space stations.* Upon completion of any relocation authorized by paragraph (b) of this section, or any relocation at end-of-life specified in an authorization, or upon a spacecraft otherwise completing its authorized mission, a space station licensee shall ensure, unless prevented by technical failures beyond its control, that all stored energy sources on board the satellite are discharged, by venting excess propellant, discharging batteries, relieving pressure vessels, and other appropriate measures.

(d) The minimum perigee requirement of paragraph (a) of this section shall not apply to space stations launched prior to March 18, 2002.

PART 97—AMATEUR RADIO SERVICE

■ 9. The authority citation for part 97 continues to read as follows:

Authority: 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply 48 Stat. 1064–1068, 1081–1105, as amended; 47 U.S.C. 151–155, 301–609, unless otherwise noted.

■ 10. Revise § 97.207(g) to read as follows:

§ 97.207 Space station.

* * * * *

(g) The license grantee of each space station must make two written pre-space station notifications to the International Bureau, FCC, Washington DC 20554. Each notification must be in accord with the provisions of Articles S9 and S11 of the ITU Radio Regulations.

(1) The first notification is required no less than 27 months prior to initiating space station transmissions and must specify the information required by Appendix S4 and Resolution No. 642 of the International Telecommunication Union Radio Regulations. The first notification shall also include a description of the design and operational strategies the space station will use to mitigate orbital debris, including the following information:

(i) A statement that the space station operator has assessed and limited the amount of debris released in a planned manner during normal operations, and has assessed and limited the probability of the space station becoming a source of debris by collisions with small debris or meteoroids that could cause loss of control and prevent post-mission disposal;

(ii) A statement that the space station operator has assessed and limited the probability of accidental explosions during and after completion of mission operations. This statement must include a demonstration that debris generation will not result from the conversion of energy sources on board the spacecraft into energy that fragments the spacecraft. Energy sources include chemical, pressure, and kinetic energy. This demonstration should address whether stored energy will be removed at the spacecraft's end of life, by depleting residual fuel and leaving all fuel line valves open, venting any pressurized system, leaving all batteries in a permanent discharge state, and removing any remaining source of stored energy, or through other equivalent procedures specifically disclosed in the application;

(iii) A statement that the space station operator has assessed and limited the probability of the space station becoming a source of debris by

collisions with large debris or other operational space stations. Where a space station will be launched into a low-Earth orbit that is identical, or very similar, to an orbit used by other space stations, the statement must include an analysis of the potential risk of collision and a description of what measures the space station operator plans to take to avoid in-orbit collisions. If the space station operator is relying on coordination with another system, the statement must indicate what steps have been taken to contact, and ascertain the likelihood of successful coordination of physical operations with, the other system. The statement must disclose the accuracy—if any—with which orbital parameters of non-geostationary satellite orbit space stations will be maintained, including apogee, perigee, inclination, and the right ascension of the ascending node(s). In the event that a system is not able to maintain orbital tolerances, *i.e.*, it lacks a propulsion system for orbital maintenance, that fact should be included in the debris mitigation disclosure. Such systems must also indicate the anticipated evolution over time of the orbit of the proposed satellite or satellites. Where a space station requests the assignment of a geostationary-Earth orbit location, it must assess whether there are any known satellites located at, or reasonably expected to be located at, the requested orbital location, or assigned in the vicinity of that location, such that the station keeping volumes of the respective satellites might overlap. If so, the statement must include a statement as to the identities of those parties and the measures that will be taken to prevent collisions;

(iv) A statement detailing the post-mission disposal plans for the space station at end of life, including the quantity of fuel—if any—that will be reserved for post-mission disposal maneuvers. For geostationary-Earth orbit space stations, the statement must disclose the altitude selected for a post-mission disposal orbit and the calculations that are used in deriving the disposal altitude. The statement must also include a casualty risk assessment if planned post-mission disposal involves atmospheric re-entry of the space station. In general, an assessment should include an estimate as to whether portions of the spacecraft will survive re-entry and reach the surface of the Earth, as well as an estimate of the resulting probability of human casualty.

(2) The second notification is required no less than 5 months prior to initiating space station transmissions and must specify the information required by

Appendix S4 and Resolution No. 642 of the Radio Regulations.

* * * * *

[FR Doc. 04-20362 Filed 9-8-04; 8:45 am]

BILLING CODE 6712-01-P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 51

[CC Docket Nos. 01-338; CC Docket No. 96-98; CC Docket No. 98-147; FCC 04-191]

Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document, the Federal Communications Commission (Commission) modifies certain of the unbundling obligations associated with fiber networks serving multiple dwelling units (MDUs) pursuant to section 251 of the Telecommunications Act of 1996 (1996 Act). Specifically, the Commission concludes that fiber networks serving predominantly residential MDUs will be subject to the same, limited unbundling obligations governing fiber-to-the-home (FTTH) loops serving individual occupancy premises. The Commission further clarifies that the definition of FTTH loops includes fiber loops deployed to the minimum point of entry (MPOE) of MDUs, regardless of the ownership of the MDU's inside wiring.

DATES: Effective October 12, 2004.

FOR FURTHER INFORMATION CONTACT: Pamela Arluk, Attorney-Advisor, Wireline Competition Bureau, at (202) 418-1580, or via the Internet at pamela.arluk@fcc.gov. The complete text of this Order on Reconsideration is available for inspection and copying during normal business hours in the FCC Reference Information Center, Portals II, 445 12th Street, SW., Room CY-A257, Washington, DC 20554. Further information may also be obtained by calling the Wireline Competition Bureau's TTY number: (202) 418-0484.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Order on Reconsideration in CC Docket No. 01-338, CC Docket No. 96-98, and CC Docket No. 98-147; FCC 04-191,

adopted August 4, 2004, and released August 9, 2004. The full text of this document may 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 1-800-378-3160, or at www.bcpiweb.com. It is also available on the Commission's Web site at <http://www.fcc.gov>.

Synopsis of the Order on Reconsideration

1. In the *Triennial Review Order* (68 FR 52276, Sept. 2, 2003), the Commission adopted rules implementing section 251 of the 1996 Act, requiring incumbent local exchange carriers (LECs) to make elements of their local network available to competitors on a unbundled basis. The *Triennial Review Order* imposed only limited unbundling obligations with respect to incumbent LECs' broadband loops. In *USTA v. FCC*, 359 F.3d 554 (D.C. Cir. 2004) (*USTA II*), the D.C. Circuit recently upheld these rules. In particular, for loops serving mass market customers, the Commission ruled that incumbent LECs need not unbundle either dark or lit fiber loops that extend to the customer's premises (known as fiber-to-the-home or FTTH loops) deployed in new build, or "greenfield," situations. Where a FTTH loop is deployed in overbuild, or "brownfield," situations, incumbent LECs must either provide unbundled access to a 64 kbps transmission path over the fiber loop or unbundled access to a spare copper loop. The FTTH rules expressly applied only to fiber loops serving individual occupancy premises, and not multiunit premises.

2. In this Order, the Commission determines that it is possible to make an administrable distinction between predominantly residential MDUs and other multiunit premises for purposes of its unbundling rules. For example, a multi-level apartment building that houses retail stores such as a drycleaner and/or a mini-mart on the ground floor would be considered predominantly residential, while an office building that contains a floor of residential suites would not.

3. The Commission concludes that it is appropriate to apply the FTTH rules to fiber deployed to predominantly residential MDUs. The Commission has the flexibility under section 251(d)(2) of the 1996 Act to consider the statutory goals of section 706, which require the Commission to encourage the deployment of advanced telecommunications capability to all Americans. In the Order, the Commission finds that the broadband

deployment goals of section 706 justify reducing the unbundling obligations on fiber to predominantly residential MDUs, providing greater incentives for the deployment of such facilities. By tailoring the Order's unbundling relief to predominantly residential MDUs, the Commission draws an administrable line between those MDUs for which unbundling relief would significantly increase broadband investment incentives and those for which it would not.

4. The Commission further concluded that a new definition of FTTH loops was necessary for purposes of the rules governing predominantly residential MDUs. The prior definition of FTTH loops required the deployment of fiber from the incumbent LEC central office all the way to the end-user customer's premises. However, many MDUs have copper wiring inside the building which is used to connect to each individual tenant. To ensure that the incentives to deploy broadband facilities extend to these buildings as well, the Commission determined that a FTTH loop in the context of predominantly residential MDUs only requires the deployment of fiber from the incumbent LEC's central office to the MPOE of the MDU, which is usually located in the basement of the building. With such a rule, the fact that the incumbent LEC may have copper inside wiring in the MDU will not result in different regulatory treatment.

Final Regulatory Flexibility Analysis

5. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the NPRM. The Commission sought written public comment on the proposals in the NPRM, including comment on the IRFA. In the *Triennial Review Order*, the Commission issued a Final Regulatory Flexibility Analysis (FRFA) addressing comments submitted with regard to the IRFA. This present Order addresses an issue raised by two petitions for reconsideration of the *Triennial Review Order*. This present Supplemental FRFA (Supplemental FRFA) conforms to the RFA.

6. *Need for, and Objectives of, the Rules.* This Order concludes that the FTTH rules, which relieve the incumbent LECs from certain unbundling obligations, will apply to MDUs that are predominantly residential. In the *Triennial Review Order* released last year, the Commission concluded that the broadband capabilities of FTTH loops would be relieved from unbundling under section 251 of the Act. Today's action builds on the broadband