

**ENVIRONMENTAL PROTECTION AGENCY****40 CFR Part 52**

[EPA-R06-OAR-2006-0132; FRL-9161-1]

**Extension of Public Comment Period for Proposed Rule on the Approval and Promulgation of Implementation Plans; Texas; Excess Emissions During Startup, Shutdown, Maintenance, and Malfunction Activities****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Extension of public comment period.

**SUMMARY:** The EPA is announcing a 14-day extension of the public comment period for the proposed "Approval and Promulgation of Implementation Plans; Texas; Excess Emissions During Startup, Shutdown, Maintenance, and Malfunction Activities." As initially published in the **Federal Register** on May 13, 2010 (75 FR 26892), written comments on the proposal for rulemaking were to be submitted to EPA on or before June 14, 2010 (a 30-day public comment period). Since publication, EPA has received requests for additional time to submit comments. Therefore, the public comment period will now end on June 28, 2010. This extension is time-limited because the rule has to be finalized by October 31, 2010 under the terms of a settlement agreement.

**DATES:** The public comment period for this proposed rule is extended until June 28, 2010.

**FOR FURTHER INFORMATION CONTACT:** Mr. Alan Shar, Air Planning Section (6PD-L), Environmental Protection Agency, Region 6, 1445 Ross Avenue, Suite 700, Dallas, Texas 75202-2733, telephone (214) 665-6691, fax (214) 665-7263, e-mail address [shar.alan@epa.gov](mailto:shar.alan@epa.gov).

**SUPPLEMENTARY INFORMATION:****I. General Information***A. Extension of Public Comment Period*

The proposed rule was signed on May 5, 2010, and published in the **Federal Register** on May 13, 2010 (75 FR 26892). The EPA has received requests for additional time to comment on the proposal. Since the 30-day public comment period would have concluded on June 14, 2010, EPA has decided to extend the comment period until June 28, 2010. This extension is time-limited because the rule must be finalized by October 31, 2010 under the terms of a settlement agreement.

*B. How can I get copies of this document and other related information?*

1. Docket. The EPA has established a docket for this action under Docket ID No. EPA-R06-OAR-2006-0132. Publicly available docket materials are available either electronically through <http://www.regulations.gov> or in hard copy at the Air Planning Section (6PD-L), Environmental Protection Agency, 1445 Ross Avenue, Suite 700, Dallas, Texas 75202-2733. The file will be made available by appointment for public inspection in the Region 6 FOIA Review Room between the hours of 8:30 a.m. and 4:30 p.m. weekdays except for legal holidays. Contact the person listed in the **FOR FURTHER INFORMATION CONTACT** paragraph below to make an appointment. If possible, please make the appointment at least two working days in advance of your visit. There will be a 15 cent per page fee for making photocopies of documents. On the day of the visit, please check in at the EPA Region 6 reception area at 1445 Ross Avenue, Suite 700, Dallas, Texas 75202-2733.

2. Electronic Access. You may access this **Federal Register** document electronically through the <http://www.gpoaccess.gov/fr/index.html>. Also, the proposed rulemaking was published in the **Federal Register** on May 13, 2010 and is available at <http://edocket.access.gpo.gov/2010/2010-11429.htm>.

Dated: June 3, 2010.

**Lawrence E. Starfield,***Acting Regional Administrator, Region 6.*

[FR Doc. 2010-14094 Filed 6-10-10; 8:45 am]

**BILLING CODE 6560-50-P****FEDERAL COMMUNICATIONS COMMISSION****47 CFR Part 15**

[ET Docket No. 10-97; FCC 10-77]

**Unlicensed Personal Communications Services Devices in the 1920-1930 MHz Band****AGENCY:** Federal Communications Commission.**ACTION:** Proposed rule.

**SUMMARY:** In this document the Commission proposes changes to its rules to enable Unlicensed Personal Communications Service (UPCS) devices operating in the 1920-1930 MHz band (known as the UPCS band) to make more efficient use of this spectrum. This action is taken in response to a Petition for Rulemaking filed by the Digital Enhanced Cordless

Telecommunications Forum (DECT), an association that promotes digital cordless radio technology for short-distance voice and data applications. The current rules prevent UPCS devices from accessing channels where a certain level of radio noise is detected, even though those channels remain usable. The proposed rule changes would adjust the radio noise level at which a channel would be deemed usable.

**DATES:** Comments must be filed on or before July 12, 2010, and reply comments must be filed on or before July 26, 2010.

**FOR FURTHER INFORMATION CONTACT:** Patrick Forster, Office of Engineering and Technology, (202) 418-7061, e-mail: [Patrick.Forster@fcc.gov](mailto:Patrick.Forster@fcc.gov), TTY (202) 418-2989.

**ADDRESSES:** You may submit comments, identified by ET Docket No. 10-97, by any of the following methods:

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

- *Federal Communications Commission's Web site:* <http://www.fcc.gov/cgb/ecfs/>. Follow the instructions for submitting comments.

- *E-mail:* [Optional: Include the E-mail address only if you plan to accept comments from the general public]. Include the docket number(s) in the subject line of the message.

- *Mail:* [Optional: Include the mailing address for paper, disk or CD-ROM submissions needed/requested by your Bureau or Office. Do not include the Office of the Secretary's mailing address here.]

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

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

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's *Notice of Proposed Rule Making*, ET Docket No. 10-97, FCC 10-77, adopted May 4, 2010, and released May 6, 2010. 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, Best Copy and Printing, Inc., 445 12th Street, SW., Room CY-

B402, Washington, DC 20554. The full text may also be downloaded at: [www.fcc.gov](http://www.fcc.gov). Pursuant to §§ 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using: (1) The Commission's Electronic Comment Filing System (ECFS), (2) the Federal Government's eRulemaking Portal, or (3) by filing paper copies. See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- *Electronic Filers:* Comments may be filed electronically using the Internet by accessing the ECFS: <http://fjallfoss.fcc.gov/ecfs2/> or the Federal eRulemaking Portal: <http://www.regulations.gov>.

- *Paper Filers:* 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, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW., Room TW-A325, Washington, DC 20554. The filing hours 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, Express, and Priority mail must be addressed to 445 12th Street, SW., Washington, DC 20554.

*People With Disabilities:* To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

### Summary of Notice of Proposed Rulemaking

1. In the *Notice of Proposed Rule Making* (NPRM), the Commission

proposes to amend part 15 of the Rules to enable Unlicensed Personal Communications Service (UPCS) devices operating in the 1920–1930 MHz band (known as the UPCS band) to make more efficient use of this spectrum. The Commission takes this action in response to a Petition for Rulemaking filed by the Digital Enhanced Cordless Telecommunications Forum (DECT), an association that promotes digital cordless radio technology for short-distance voice and data applications. The current rules prevent UPCS devices from accessing channels where a certain level of radio noise is detected, even though those channels remain usable. The proposed rule changes would adjust the radio noise level at which a channel would be deemed usable.

2. In its petition for rulemaking, DECT requested that the Commission modify part 15 of its rules to either eliminate or increase the least-interfered channel monitoring threshold and to reduce the number of channels a UPCS device must use and monitor in order to operate under the least-interfered channel access method. The least-interfered channel monitoring threshold is the radio noise level that a UPCS device must monitor to determine whether there is a channel available on which to transmit. Specifically, DECT proposed that the Commission amend § 15.323(c)(5) of the Rules to: (1) Eliminate the least-interfered channel monitoring threshold or, alternatively, to increase the threshold from 50 decibels (dB) above thermal noise to 65 dB above thermal noise; and (2) reduce from 40 to 20 channels the number of duplex system access channels that a UPCS device must use and monitor in order to operate under the least-interfered channel access method. As described by DECT, a UPCS device without a least-interfered channel monitoring threshold would survey the required minimum number of channels and transmit on the channels with the lowest power. According to DECT, if the least-interfered channel monitoring threshold is eliminated or increased, a UPCS device would be able to access channels that are actually usable for communication but that cannot be accessed under the existing 50 dB above thermal noise threshold. DECT also indicates that if the number of channels a UPCS device must use and monitor is reduced from 40 to 20 channels, broadband UPCS devices that use fewer than 40 channels (i.e., that use wider bandwidth channels) will be permitted to use the least-interfered channel access method and won't be restricted to

using only channels with a signal level less than 30 dB above thermal noise. DECT states that neither of these changes will cause interference to adjacent-band Advanced Wireless Service (AWS) and PCS services.

3. DECT claims that its requested part 15 rule changes would also limit the potential for 1915–1920 MHz-band mobile transmitters' out-of-band emissions to restrict UPCS devices' use of the UPCS band once operations begin in the 1915–1920 MHz band.

4. The Commission specifically proposes to revise § 15.323 of our rules to increase least-interfered channel monitoring threshold. The Commission also proposes to reduce from 40 to 20 channels the number of duplex system access channels that a UPCS device must monitor and use under the least-interfered channel access method. The proposed changes would increase the number of channels that could be used by UPCS devices, particularly those devices designed to transmit on wider bandwidth channels, and thus facilitate the introduction of unlicensed devices capable of providing access to broadband services in the 1920–1930 MHz band. The Commission requests comment on these proposals.

5. The Commission believes there is merit to DECT's requests to increase the UPCS least-interfered channel monitoring threshold and to reduce the number of channels that a UPCS device must monitor and use in order to use the least-interfered channel access method. The Commission is persuaded that the requested modifications would have substantive benefits for users of devices that operate in the UPCS band and promote more efficient use of the UPCS-band spectrum. Therefore, it proposes to modify the UPCS Rules as DECT requested. The Commission notes that its previous modifications to the UPCS-band operating rules to widen the maximum allowed bandwidth and permit asynchronous operations together with isochronous operations in the 1920–1930 MHz band have resulted in significantly more use of the UPCS band. It believes these changes that DECT has requested are likely to produce analogous results. In particular, the Commission believes that the proposed rule modifications would facilitate the development of unlicensed devices capable of providing access to broadband services.

6. The Commission proposes to modify § 15.323 to specify a least-interfered channel monitoring threshold of 65 dB above thermal noise, as reflected in the proposed rules set forth in Appendix A of the NPRM. It believes this action would serve the public

interest by allowing more devices to access usable channels and thereby increasing the utilization of the UPCS band. The Commission agrees with DECT that increasing this threshold would allow UPCS devices to transmit on channels that currently are restricted from use under the existing 50 dB above thermal noise threshold, but that are actually acceptable for use.

7. The Commission observed that the least-interfered channel monitoring threshold level used in one UPCS system could affect the range and channel availability of other UPCS systems. The absence of a least-interfered channel monitoring threshold—where a UPCS device would survey the required minimum number of channels and transmit on the channels with the lowest power and an alternative approach suggested by DECT—could require affected systems to install additional base stations to mitigate the impact. This scenario could occur in a small office environment with different occupants operating separate systems in close proximity. The Commission believes that increasing the least-interfered channel monitoring threshold to 65 dB above thermal noise is preferable to DECT's alternative proposal to eliminate the threshold and strikes an appropriate balance. The Commission believes that maintaining a specific least-interfered channel monitoring threshold would limit the potential for one UPCS system's devices to restrict the range and access to channels of another UPCS system's devices and avoid undue congestion in the UPCS band.

8. At the same time, an increase in the least-interfered channel monitoring threshold would increase the utilization of the UPCS band and reduce UPCS system infrastructure costs. The Commission noted that DECT states that a threshold increase to 65 dB above thermal noise would increase the utilization of the UPCS band by over 60 percent. Also, as DECT states, although a threshold of 50 dB above thermal noise optimizes the range of UPCS devices, an increase in the monitoring threshold from 50 to 65 dB above thermal noise would allow manufacturers to optimize their systems for density of devices rather than range, depending on the needs of users. As a result, this would allow more UPCS devices to be used within close proximity of one another, such as in adjacent cubicles in an office environment. Although each device would lose some range in such a scenario due to the density of spectral use, any decrease in range would likely have little effect on users because the

devices in such dense systems typically operate just a short distance from the nearest base station. The Commission also believes that a least-interfered channel monitoring threshold of 65 dB above thermal noise would help limit the potential for in-band and out-of-band interference, facilitate efficient use of the UPCS spectrum, and permit all users to access the available spectrum on a shared basis. The Commission seeks comment on this proposal. It also seeks comment on our observations with respect to the selection of 65 dB above thermal noise as the monitoring threshold and whether some alternative value or elimination of the threshold would be more appropriate.

9. Because all UPCS devices would continue to operate using a listen-before-talk protocol, they will not interfere with each other once a device is transmitting on a channel. Furthermore, because UPCS devices all operate at relatively low power levels, two devices would need to be within less than 1 foot of each other to impact one another. Consequently, the Commission believes the probability of interference occurring among UPCS devices operating under the proposed monitoring threshold or between such devices and those operating under the current monitoring threshold will remain low. In addition, although an increase in the least-interfered channel threshold could, in some cases, result in an increased number of UPCS devices simultaneously operating in a given location, they would be operating with relatively low peak transmitter power and out-of-band emissions limits. Thus, the Commission believes the potential for harmful interference to nearby relatively higher-power AWS and PCS devices (either fixed or mobile) receiving in the adjacent 1915–1920 and 1930–1990 MHz bands, respectively, will not be significantly increased in such cases. The Commission seeks comment on these observations.

10. The Commission also proposes to modify rule § 15.323 to reduce from 40 to 20 channels the number of channels that a UPCS device must monitor and use in order to operate under the least-interfered channel access method in the 1920–1930 MHz band, as reflected in the proposed rules set forth in Appendix A in the *NPRM*. Such action would appear to serve the public interest by allowing state-of-the-art UPCS devices that can provide broadband services, but using fewer than 40 channels, to operate under the least-interfered channel access method and access channels with a higher signal level, if available. DECT states that halving the number of monitored and

used channels is justified by the Commission's previous decision to double the maximum allowed UPCS channel bandwidth from 1.25 to 2.5 megahertz. It also indicates that there are now UPCS devices operating with up to five 2-megahertz-wide channels that provide more advanced state-of-the-art broadband services. When these wider channels are subdivided, however, fewer access channels are available to satisfy the current minimum number of channels to be monitored under the least-interfered channel rule. Devices that can support access to broadband services but use fewer than 40 channels are thus limited to using channels with a signal level less than 30 dB above thermal noise. Consequently, these devices' access to the UPCS band is severely limited in many instances, especially in areas of high use of UPCS devices. Reducing the number of monitored channels would increase the utilization of the UPCS band by allowing wider-bandwidth devices to access channels that are usable under the least-interfered channel access criteria. Also, if the number of channels that must be monitored and used is reduced so that wider-bandwidth devices' access to channels is unrestricted, the ability of these devices to have higher throughputs (*i.e.*, data rates) could help to improve the efficiency of the UPCS band. In addition, maintaining a requirement for UPCS devices to monitor and use at least 20 channels would enable all users to have equal access to the available spectrum on a shared basis. The Commission seeks comment on this proposal.

11. DECT filed comments on the *AWS-2/AWS-3 Service Rules FNPRM*, expressing concern about the potential for the out-of-band emissions limit proposed for 1915–1920 MHz-band mobile transmitters to restrict UPCS devices' access to the UPCS band. Nonetheless, because DECT believes that its proposed part 15 rule changes will improve the utilization, quality, and services of the UPCS band, especially for new state-of-the-art broadband services, DECT asks that the Commission not defer action on the instant petition pending the outcome of the *AWS-2* proceeding. In this *NPRM*, the Commission addresses only the DECT Forum petition for rulemaking of the part 15 rules for the UPCS band. The Commission neither solicits comments on nor makes any decision with respect to the pending *AWS-2* service rules proceeding.

12. *Other Matters.* In January 1993, representatives from a broad range of UPCS equipment manufacturers created

the Unlicensed PCS Ad Hoc Committee for 2 GHz Microwave Transition and Management (UTAM) to facilitate the transition of the 1920–1930 MHz band from fixed microwave radio service use to UPCS use. UTAM incorporated itself as a not-for-profit corporation under the name of UTAM, Inc., in July 1993. In the *Broadband PCS Second Report and Order*, the Commission designated UTAM, Inc., to coordinate and manage the transition of the 1920–1930 MHz band from incumbent fixed microwave operations to UPCS use. The rules the Commission adopted to implement this process were to sunset after a ten-year period. Because the need for UPCS devices to protect fixed microwave incumbents in the 1920–1930 MHz band sunset on April 4, 2005, on its own motion, the Commission proposes to remove § 15.307 of the rules. In proposing this change, the Commission notes that with the sunset of the requirement that UPCS devices protect fixed microwave incumbents in the UPCS band, it is no longer necessary to (1) distinguish between coordinatable and non-coordinatable UPCS devices under the equipment authorization process, as specified in § 15.307(c); (2) require a coordinatable UPCS device to incorporate certain coordination features, as specified in § 15.307(d) and (e); (3) require UPCS operators to protect fixed microwave incumbents in the 1920–1930 MHz band, as set forth in § 15.307(g); and (4) require a UPCS device to cease operating upon relocation until coordination for the new location is verified by UTAM, Inc., as set forth in § 15.307(h). Furthermore, § 15.307(a), (b), and (f) of the Commission's rules, which respectively (1) describe UTAM, Inc.'s function; (2) require each applicant for certification (i.e., authorization) of a UPCS device to be a participating member of UTAM, Inc.; and (3) sets forth that the requirement for including the disabling mechanism in a UPCS device would be discontinued when the Commission determines that UPCS devices no longer need to be coordinated, are also no longer needed. In addition, the Commission proposes to delete the UTAM, Inc.-related labeling requirement in § 15.311, because UPCS devices are no longer coordinated by UTAM, Inc. The Commission further proposes to delete the definitions in § 15.303(b) and (e) that were applicable when UPCS devices were either coordinatable or non-coordinatable because these rules are now unnecessary. The Commission seeks comment on all of these proposals, and on any other rules changes that might be

warranted as a result of the sunset of the transition of the band from incumbent fixed microwave operations to UPCS use.

13. The Commission also takes this opportunity to propose modifications to certain other UPCS rules to make them consistent with other changes that have been made to the rules. In this regard, it proposes to amend § 15.31(a)(2) to update the version of the standard by which UPCS devices must be measured for compliance with the performance requirements in part 15 Subpart D of the rules, and to revise § 15.323(a) to correct a typographical error in the second sentence. Also, consistent with the decision in the *AWS Sixth R&O*, the Commission proposes to delete the definition in § 15.303(i) that was applicable when asynchronous and isochronous operations were in separate sub-bands and to amend § 15.319 to specifically state that both asynchronous and isochronous operations are permitted in the 1920–1930 MHz band. These proposed rule modifications are reflected in Appendix A of the *NPRM*. The Commission seeks comment on all of these proposals. In addition, it seeks comment on changes to any of the other rules regarding UPCS devices which should be made due to the kind of errors or intervening events or developments that we have identified in this paragraph.

#### Ordering Clauses

14. Pursuant to sections 1, 2, 4(i), 301, 302, and 303(f) of the Communications Act of 1934, 47 U.S.C. 151, 152, 154(i), 301, 302a, and 303(f), that this *Notice of Proposed Rulemaking* is hereby adopted.

15. Notice is hereby given of the proposed regulatory changes described in this *Notice of Proposed Rulemaking*, and that comment is sought on these proposals.

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

#### Initial Regulatory Flexibility Analysis

17. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),<sup>1</sup> the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the

<sup>1</sup> 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).

possible significant economic impact on small entities by the policies and rules proposed in this *Notice of Proposed Rule Making (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 specified on the first page of 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 (SBA).<sup>2</sup> In addition, the *NPRM* and IRFA (or summaries thereof) will be published in the **Federal Register**.<sup>3</sup>

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

18. The *NPRM* proposes rules and seeks comment on specific issues related to the operation of unlicensed Personal Communications Services (UPCS) devices operating in the 1920–1930 MHz band (known as the UPCS band). The proposals are intended to improve the utilization of the UPCS band by increasing access to usable channels whose use is restricted under the current rules, by reducing infrastructure costs through allowing a greater density of UPCS devices to be used with fewer base stations, and by preventing the out-of-band emissions that have been proposed for Advanced Wireless Service (AWS) mobile transmitters in the 1915–1920 MHz from limiting UPCS devices' access to the 1920–1930 MHz UPCS band. The proposals are also designed to allow UPCS devices that are using fewer than 40 defined channels to use the UPCS least-interfered channel access method. Permitting these devices to use the least-interfered channel access method would prevent these devices' access to the UPCS band from being severely limited. The *NPRM* seeks comment on increasing the least-interfered channel threshold that UPCS devices must monitor for when using the least-interfered channel access method from 50 (dB) above thermal noise to 65 dB above thermal noise. In addition, the *NPRM* seeks comment on reducing from 40 to 20 channels the number of channels a UPCS device must define and monitor in order to use the least-interfered channel access method.

#### B. Legal Basis

19. This action is authorized under sections 1, 4(i), 302, 303(f) and (r), 332, and 337 of the Communications Act of 1934, as amended, 47 U.S.C. 1, 4(i), 154(i), 302a, 303(f) and (r), 332, 337.

<sup>2</sup> See 5 U.S.C. 603(a).

<sup>3</sup> See 5 U.S.C. 603(a).

*C. Description and Estimate of the Number of Small Entities to Which the Proposed Rule Will Apply*

20. 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.<sup>4</sup> 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.<sup>5</sup> 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 SBA.<sup>6</sup>

21. Nationwide, there are a total of approximately 29.6 million small businesses, according to the SBA.<sup>7</sup> A “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”<sup>8</sup> Nationwide, as of 2002, there were approximately 1.6 million small organizations.<sup>9</sup> The term “small governmental jurisdiction” is defined generally as “governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”<sup>10</sup> Census Bureau data for 2002 indicate that there were 87,525 local governmental jurisdictions in the United States.<sup>11</sup> We estimate that, of this total, 84,377 entities were “small governmental jurisdictions.”<sup>12</sup> Thus, we

estimate that most governmental jurisdictions are small.

22. The proposals in this *NPRM* affect fixed service (FS) stations licensed under part 101 of our rules, UPCS stations, as well as wireless equipment manufacturers and frequency coordinators.

*Fixed Microwave Services.* Fixed microwave services include common carrier,<sup>13</sup> private operational-fixed,<sup>14</sup> and broadcast auxiliary radio services.<sup>15</sup> At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not created a size standard for a small business specifically with respect to fixed microwave services. For purposes of this analysis, the Commission uses the SBA small business size standard for the category Wireless Telecommunications Carriers (except Satellite), which is 1,500 or fewer employees.<sup>16</sup> The Commission does not have data specifying the number of these licensees that have no more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA’s small business size standard. Consequently, the Commission estimates that there are 22,015 or fewer common carrier fixed licensees and 61,670 or fewer private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services that may be small and may be affected by the rules and policies proposed herein. We note, however, that the common carrier microwave fixed licensee category includes some large entities.

<sup>13</sup> See 47 CFR 101 *et seq.* for common carrier fixed microwave services (except Multipoint Distribution Service).

<sup>14</sup> Persons eligible under parts 80 and 90 of the Commission’s Rules can use Private Operational-Fixed Microwave services. See 47 CFR Parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee’s commercial, industrial, or safety operations.

<sup>15</sup> Auxiliary Microwave Service is governed by part 74 of Title 47 of the Commission’s rules. See 47 CFR part 74. This service is available to licensees of broadcast stations and to broadcast and cable network entities. Broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile television pickups, which relay signals from a remote location back to the studio.

<sup>16</sup> 13 CFR 121.201, NAICS code 517210.

*Unlicensed Personal Communications Services.* As its name indicates, UPCS is not a licensed service. UPCS consists of intentional radiators operating in the frequency bands 1920–1930 MHz and 2390–2400 MHz that provide a wide array of mobile and ancillary fixed communication services to individuals and businesses. The *NPRM* potentially affects UPCS operations in the 1920–1930 MHz band; operations in those frequencies are given flexibility to deploy both voice and data-based services. There is no accurate source for the number of operators in the UPCS. Since 2007, the Census Bureau has placed wireless firms within the new, broad, economic census category Wireless Telecommunications Carriers (except Satellite).<sup>17</sup> Prior to that time, such firms were within the now-superseded category of “Paging” and “Cellular and Other Wireless Telecommunications.”<sup>18</sup> Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.<sup>19</sup> Because Census Bureau data are not yet available for the new category, we will estimate small business prevalence using the prior categories and associated data. For the category of Paging, data for 2002 show that there were 807 firms that operated for the entire year.<sup>20</sup> Of this total, 804 firms; had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.<sup>21</sup> For the category of Cellular and Other Wireless Telecommunications, data for 2002 show that there were 1,397 firms that operated for the entire year.<sup>22</sup> Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000

<sup>17</sup> U.S. Census Bureau, 2007 NAICS Definitions, “517210 Wireless Telecommunications Categories (Except Satellite)”; <http://www.census.gov/naics/2007/def/ND517210.HTM#N517210>.

<sup>18</sup> U.S. Census Bureau, 2002 NAICS Definitions, “517211 Paging”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>; U.S. Census Bureau, 2002 NAICS Definitions, “517212 Cellular and Other Wireless Telecommunications”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>.

<sup>19</sup> 13 CFR 121.201, NAICS code 517210 (2007 NAICS). The now-superseded, pre-2007 CFR citations were 13 CFR 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

<sup>20</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517211 (issued Nov. 2005).

<sup>21</sup> *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

<sup>22</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517212 (issued Nov. 2005).

<sup>4</sup> *Id.* at 603(b)(3).

<sup>5</sup> 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).

<sup>6</sup> Small Business Act, 15 U.S.C. 632 (1996).

<sup>7</sup> See SBA, Office of Advocacy, “Frequently Asked Questions,” <http://web.sba.gov/faqs/faqindex.cfm?areaid=24> (revised Sept. 2009).

<sup>8</sup> 5 U.S.C. 601(4).

<sup>9</sup> Independent Sector, *The New Nonprofit Almanac & Desk Reference* (2002).

<sup>10</sup> 5 U.S.C. 601(5).

<sup>11</sup> U.S. Census Bureau, *Statistical Abstract of the United States: 2006*, Section 8, page 272, Table 415.

<sup>12</sup> We assume that the villages, school districts, and special districts are small, and total 48,558. See U.S. Census Bureau, *Statistical Abstract of the United States: 2006*, section 8, page 273, Table 417. For 2002, Census Bureau data indicate that the total number of county, municipal, and township governments nationwide was 38,967, of which 35,819 were small. *Id.*

employees or more.<sup>23</sup> Thus, we estimate that the majority of wireless firms are small.

*Wireless Equipment Manufacturers* are defined by the Census Bureau as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: Transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment."<sup>24</sup> The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is: All such firms having 750 or fewer employees.<sup>25</sup> According to Census Bureau data for 2002, there were a total of 1,041 establishments in this category that operated for the entire year.<sup>26</sup> Of this total, 1,010 had employment of under 500, and an additional 13 had employment of 500 to 999.<sup>27</sup> Thus, under this size standard, the majority of firms can be considered small.

*Frequency Coordinators.* Neither the Commission nor the SBA has developed a small business size standard specifically applicable to spectrum frequency coordinators. Since 2007, the Census Bureau has placed wireless firms within the new, broad, economic census category Wireless Telecommunications Carriers (except

Satellite).<sup>28</sup> Prior to that time, such firms were within the now-superseded category of "Paging" and "Cellular and Other Wireless Telecommunications."<sup>29</sup> Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.<sup>30</sup> Because Census Bureau data are not yet available for the new category, we will estimate small business prevalence using the prior categories and associated data. For the category of Paging, data for 2002 show that there were 807 firms that operated for the entire year.<sup>31</sup> Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.<sup>32</sup> For the category of Cellular and Other Wireless Telecommunications, data for 2002 show that there were 1,397 firms that operated for the entire year.<sup>33</sup> Of this total, 1,378 firms had employment of 999 fewer employees, and 19 firms had employment of 1,000 employees or more.<sup>34</sup> Thus, we estimate that the majority of these firms are small.

#### *D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities*

23. This *NPRM* addresses the possibility of allowing additional flexibility for UPCS devices operating in the 1920–1930 MHz band by eliminating or increasing the least-interfered channel monitoring threshold that a UPCS device must employ when using the least-interfered channel access method. In addition, the *NPRM*

addresses the possibility of decreasing from 40 to 20 channels the number of channels that a UPCS device must define and monitor to use the least-interfered channel access method. The item does not contain any new reporting or recordkeeping requirements.

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

24. 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.<sup>35</sup>

25. We have proposed to reduce burdens wherever possible. Our proposals regarding the UPCS band would reduce burdens on small entities. Our proposal to increase the least-interfered channel-threshold will increase the utilization of the UPCS by allowing access to usable channels that are currently restricted under the current Rules, resulting in more efficient use of the UPCS-band spectrum. It will also allow a greater density of UPCS devices to be used with fewer base stations, thereby reducing the infrastructure costs for a UPCS system, and will prevent the out-of-band emissions from adjacent-band AWS mobile transmitters from limiting access to the UPCS band. Our proposal to raise the least-interfered channel threshold, rather than eliminate the threshold, will prevent one UPCS systems' device's from limiting the range of another UPCS system's devices, which would require the installation of additional base stations to mitigate. Our proposal to reduce from 40 to 20 channels the number of channels a UPCS device must define and monitor to use the least-interfered channel access method would prevent devices that can provide state-of-the-art broadband services from being denied use of the least-interfered channel access method and consequently experiencing restricted access to UPCS-band channels.

26. We will continue to examine alternatives in the further with the objectives of eliminating unnecessary

<sup>23</sup> Id. The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

<sup>24</sup> U.S. Census Bureau, 2002 NAICS Definitions, "334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing"; <http://www.census.gov/epcd/naics02/def/NDEF334.HTM#N3342>.

<sup>25</sup> See 13 CFR 121.201, NAICS code 334220.

<sup>26</sup> U.S. Census Bureau, American FactFinder, 2002 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 334220 (released May 26, 2005); <http://factfinder.census.gov>. The number of "establishments" is a less helpful indicator of small business prevalence in this context than would be the number of "firms" or "companies," because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for firms or companies only to give the total number of such entities for 2002, which were 929.

<sup>27</sup> Id. An additional 18 establishments had employment of 1,000 or more.

<sup>28</sup> U.S. Census Bureau, 2007 NAICS Definitions, "517210 Wireless Telecommunications Categories (Except Satellite)"; <http://www.census.gov/naics/2007/def/ND517210.HTM#N517210>.

<sup>29</sup> U.S. Census Bureau, 2002 NAICS Definitions, "517211 Paging"; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>; U.S. Census Bureau, 2002 NAICS Definitions, "517212 Cellular and Other Wireless Telecommunications"; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>.

<sup>30</sup> 13 CFR 121.201, NAICS code 517210 (2007 NAICS). The now-superseded, pre-2007 CFR citations were 13 CFR 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

<sup>31</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517211 (issued Nov. 2005).

<sup>32</sup> Id. The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

<sup>33</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517212 (issued Nov. 2005).

<sup>34</sup> Id. The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

<sup>35</sup> 5 U.S.C. 603(c).

regulations and minimizing significant economic impact on small entities. We seek comment on significant alternatives commenters believe we should adopt.

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

None.

**List of Subjects 47 CFR Part 15**

Communications equipment, Radio.  
Federal Communications Commission.

**Marlene H. Dortch,**  
*Secretary.*

**Rule Changes**

For the reasons set forth in the preamble, the Federal Communications Commission proposes to amend part 15 of Title 47 of the Code of Federal Regulations to read as follows:

**PART 15—RADIO FREQUENCY DEVICES**

1. The authority citation for part 15 continues to read as follows:

**Authority:** 47 U.S.C. 154, 302a, 303, 304, 307, 336, and 544a.

2. Section 15.31 is amended by revising paragraph (a)(2) to read as follows:

**§ 15.31 Measurement standards.**

- (a) \* \* \*
- (1) \* \* \*

(2) Unlicensed Personal Communication Service (UPCS) devices are to be measured for compliance using ANSI C63.17–2006: “Methods of Measurement of the Electromagnetic and Operational Compatibility of Unlicensed Personal Communications Services (UPCS) Devices” (incorporated by reference, see § 15.38). This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

3. Section 15.38 is amended by revising paragraph (b)(12) to read as follows:

**§ 15.38 Incorporation by reference.**

- (b) \* \* \*

(12) ANSI C63.17–2006: “Methods of Measurement of the Electromagnetic and Operational Compatibility of Unlicensed Personal Communications Services (UPCS) Devices”, 2006, IBR approved for § 15.31.

4. Section 15.303 is amended by removing paragraphs (b), (e), (i), and

re-designating paragraphs (a) through (k) as paragraphs (a) through (h) in alphabetical order.

**§ 15.303 Definitions.**

**§ 15.307 [Removed]**

5. Remove § 15.307.

**§ 15.311 [Removed]**

6. Remove § 15.311.

7. Section 15.319 is amended by revising paragraph (b) to read as follows:

**§ 15.319 General technical requirements.**

\* \* \* \* \*

(b) All transmissions must use only digital modulation techniques. Both asynchronous and isochronous operations are permitted within the 1920–1930 MHz band.

\* \* \* \* \*

8. Section 15.323 is amended by revising the section heading and paragraphs (a), (c)(5), (d), and (e) to read as follows:

**§ 15.323 Specific requirements for devices operating in the 1920–1930 MHz band.**

(a) Operation shall be contained within the 1920–1930 MHz band. The emission bandwidth shall be less than 2.5 MHz. The power level shall be as specified in § 15.319(c), but in no event shall the emission bandwidth be less than 50 kHz.

\* \* \* \* \*

(c) \* \* \*

(5) If access to spectrum is not available as determined by the above, and a minimum of 20 duplex system access channels are defined for the system, the time and spectrum windows with the lowest power level below a monitoring threshold of 65 dB above the thermal noise power determined for the emission bandwidth may be accessed. A device utilizing the provisions of this paragraph must have monitored all access channels defined for its system within the last 10 seconds and must verify, within the 20 milliseconds (40 milliseconds for devices designed to use a 20 milliseconds frame period) immediately preceding actual channel access that the detected power of the selected time and spectrum windows is no higher than the previously detected value. The power measurement resolution for this comparison must be accurate to within 6 dB. No device or group of co-operating devices located within 1 meter of each other shall during any frame period occupy more than 6 MHz of aggregate bandwidth, or alternatively, more than one third of the time and spectrum windows defined by the system.

\* \* \* \* \*

(d) Emissions outside the band shall be attenuated below a reference power of 112 milliwatts as follows: 30 dB between the band and 1.25 MHz above or below the band; 50 dB between 1.25 and 2.5 MHz above or below the band; and 60 dB at 2.5 MHz or greater above or below the band. Emissions inside the band must comply with the following emission mask: In the bands between 1B and 2B measured from the center of the emission bandwidth the total power emitted by the device shall be at least 30 dB below the transmit power permitted for that device; in the bands between 2B and 3B measured from the center of the emission bandwidth the total power emitted by an intentional radiator shall be at least 50 dB below the transmit power permitted for that radiator; in the bands between 3B and the band edge the total power emitted by an intentional radiator in the measurement bandwidth shall be at least 60 dB below the transmit power permitted for that radiator. “B” is defined as the emission bandwidth of the device in hertz. Compliance with the emission limits is based on the use of measurement instrumentation employing a peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

(e) The frame period (a set of consecutive time slots in which the position of each time slot can be identified by reference to a synchronizing source) of an intentional radiator operating in this band shall be 20 milliseconds or 10 milliseconds/X where X is a positive whole number. Each device that implements time division for the purposes of maintaining a duplex connection on a given frequency carrier shall maintain a frame repetition rate with a frequency stability of at least 50 parts per million (ppm). Each device which further divides access in time in order to support multiple communications links on a given frequency carrier shall maintain a frame repetition rate with a frequency stability of at least 10 ppm. The jitter (time-related, abrupt, spurious variations in the duration of the frame interval) introduced at the two ends of such a communication link shall not exceed 25 microseconds for any two consecutive transmissions. Transmissions shall be continuous in every time and spectrum window during the frame period defined for the device.

\* \* \* \* \*