utility districts, school districts, and states. Of the 38,978 counties, cities and towns, 37,566, or 96%, have populations of fewer than 50,000. The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that 81,606 (96%) are small entities.

IV. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

25. This Notice of Proposed Rulemaking proposes no additional reporting, recordkeeping or other compliance measures.

V. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

26. This Notice of Proposed Rulemaking seeks comment on how the inquiries set forth could impact regulated entities, including small entities. For example, with respect to our inquiry into building owner obligations, we seek comment on whether we should limit the scope of any building owner obligation in order to avoid imposing unreasonable regulatory burdens on building owners, and we suggest that a potential rule could exempt buildings that house fewer than a certain number of tenants or are under a certain size. Commenters are invited to address the economic impact of all of our proposals on small entities and offer any alternatives.

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

27. None.

List of Subjects

47 CFR Parts 1 and 51

Communications common carriers, Telecommunications.

47 CFR Part 68

Communications common carriers, Communications equipment.

47 CFR Part 76

Cable television.

Federal Communications Commission.

William F. Caton,

Deputy, Secretary.

[FR Doc. 99–19635 Filed 7–30–99; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 2 and 95

[ET Docket 99–255; FCC 99–182]

Wireless Medical Telemetry Service

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: This document proposes to amend the Commission's rules to allocate spectrum and to establish rules for a Wireless Medical Telemetry Service. This action is intended to allow potentially life-critical medical telemetry equipment, which currently operates on a secondary basis, unprotected from interference, to operate on a blanket licensed, interference protected basis. We believe our action will improve the reliability of this critical service.

DATES: Comments must be filed on or before September 16, 1999, and reply comments must be filed on or before October 18, 1999.

ADDRESSES: Address all comments concerning this proposed rule to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, FCC, 445 12th Street SW, Washington, DC 20554.

FOR FURTHER INFORMATION CONTACT: Hugh L. Van Tuyl, Office of Engineering and Technology, (202) 418–7506, TTY (202) 418–2989, e-mail: hvantuyl@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's *Notice of Proposed Rule Making*, ET Docket 99–255, FCC 99–182, adopted July 14, 1999 and released July 16, 1999. The full text of this document is available for inspection and copying during regular business hours in the FCC Reference Information Center, Room CY–A257, 445 12th Street, SW, Washington, DC, and is available on the FCC's Internet site at http://www.fcc.gov/oet/dockets/et99–255/. The complete text of this document may also be purchased from the Commission's duplication contractor, International Transcription Service, Inc., (202) 857–3800, 1231 20th Street, NW, Washington, DC 20036.

Summary of Notice of Proposed Rule Making

1. The Commission proposes to amend parts 2 and 95 of the rules to allocate spectrum and to establish service rules for a Wireless Medical Telemetry Service. It proposes to allocate frequencies for medical telemetry equipment to operate on a primary basis. Two possible options for frequencies are proposed; (1) 608–614 MHz, 1395–1400 MHz and 1429–1432 MHz, or (2) 608–614 MHz and 1391–1400 MHz. This action is intended to allow potentially life-critical medical telemetry equipment, which currently operates on a secondary basis, unprotected from interference, to operate on a blanket licensed, interference protected basis. We believe our action will improve the reliability of this critical service.

2. Medical telemetry equipment is used in hospitals and health care facilities to transmit patient measurement data to a nearby receiver, permitting greater patient mobility and increased comfort. Examples of medical telemetry equipment include heart, blood pressure and respiration monitors. The use of these devices allows patients to move around early in their recovery while still being monitored for adverse symptoms. With such devices, one health care worker can monitor several patients remotely, thus decreasing health care costs.

3. Currently, medical telemetry devices are allowed to operate under either part 15 or part 90 of the Commission's rules. Part 15 of the rules permits medical telemetry equipment to operate on an unlicensed basis on TV channels 7–13 and 14–46 (174–216 MHz and 470–668 MHz). Part 90 of the rules permits medical telemetry equipment to operate on a secondary basis to land mobile users in the 450–470 MHz band.

4. There have been recent changes to the Commission's rules that could result in harmful interference to medical telemetry equipment operating under part 15. At the direction of Congress, the Commission has provided for the introduction of digital television (DTV) stations in the TV broadcast bands. In order to accomplish this, the Commission has provided each local TV station with an additional channel that will be used to broadcast DTV during the transition. This means that there will be fewer vacant channels in every market, and that in some areas, channels that were once unused for TV broadcasting may now be used for DTV.

5. To reduce the possibility of DTV causing interference to medical telemetry equipment, the Commission adopted changes to part 15 of the rules in 1997 to increase the number of TV frequencies where medical telemetry devices could operate on an unlicensed basis. These changes allow operation on TV channels 14–46 in addition to channels 7–13, which were the only channels where medical telemetry equipment was previously allowed to operate. The Commission also increased the maximum allowable operating

power for these devices to improve reliability.

6. The transition from analog to digital television is currently under way, with the first stations commencing regular DTV broadcasting in November 1998. The Commission has created over 1600 allotments for DTV stations, a large percentage of which are on TV channels 7–46, which are also used for medical telemetry equipment operating under part 15 of the rules. All television stations are required to commence DTV broadcasting no later than May 1, 2003. As existing stations begin DTV operation on their new channels, some low-power television stations currently operating on or adjacent to those channels may be forced to switch frequency to avoid causing harmful interference to DTV, thereby further crowding the spectrum used by medical telemetry equipment.

7. Concerns about possible interference to medical telemetry equipment by DTV operations were recently heightened. In March 1998, a TV station in Texas began test transmissions on a previously unused channel that had been assigned to it for DTV operation. The transmissions caused severe interference to the operation of medical telemetry equipment at a nearby hospital, rendering the equipment temporarily unusable. The station immediately ceased operation upon learning of the interference, and the medical telemetry equipment was changed to operate on another frequency. The Commission and the Food and Drug Administration have since taken steps to help ensure that hospitals are notified before new DTV stations come on the air to provide them with time to modify any medical telemetry equipment that operates on the same frequency.

8. The American Hospital Association's (AHA) Medical Telemetry Task Force recently submitted recommendations to the Commission for addressing the potential critical safety risks to patients from harmful interference caused to wireless medical telemetry equipment. The task force was established in response to the incidence of interference to medical telemetry equipment from a DTV station. Among the AHA recommendations are that specific frequencies be allocated for a medical telemetry service, and that the service be given primary status on those frequencies.

9. Medical telemetry equipment is increasingly relied upon in hospitals to improve health care and reduce costs. Patients that require the monitoring and treatment capabilities that were formerly available only in intensive care units can be moved to general nursing units. Patient recovery is also improved because the general nursing unit offers a less stressful environment. The number of patients with chronic medical conditions is rising due to the growth in the elderly population. For these reasons, the need for monitoring patients outside of intensive care is rapidly increasing, and this need can be fulfilled with medical telemetry equipment. As we noted, it may be difficult for this equipment to continue to operate in the bands used for DTV and the PLMR services without receiving interference. Given the importance of this equipment, we tentatively conclude that it is necessary to find additional spectrum for medical telemetry equipment. We further tentatively conclude that the spectrum should be allocated on a primary basis to ensure that medical telemetry equipment is able to function without interference from other sources. We seek comment on these tentative conclusions.

10. The AHA performed a survey of 14 hospitals of various sizes in both metropolitan and suburban/rural areas to determine the amount of spectrum needed for medical telemetry equipment. The survey results identify six categories of patient medical parameters that may be measured, and indicate that up to 600 patients may need to be monitored concurrently at a single facility. In order to calculate the required spectrum, AHA assumed the transmitters would operate with a spectral efficiency of 0.8 bits per second per Hertz, which is approximately the same spectral efficiency the Commission requires in part 90 of the rules. AHA then calculated the required spectrum for each of the six categories of parameters and determined that a total of 6.125 MHz is required to meet current patient needs. The AHA survey also indicated that the spectrum requirements for medical telemetry equipment would likely double within ten years. Therefore, AHA believes that in the long term, at least 12 MHz of spectrum is needed for medical telemetry equipment. We invite comment on this analysis, including whether the assumed spectral efficiency is reasonable, and whether more spectrally efficient technologies could be employed to reduce the amount of spectrum required.

11. The AHA performed an analysis of the suitability of various frequency bands, based on such factors as equipment costs, data reliability, amount of spectrum in each band and equipment power consumption. Based on its study, the AHA recommends that the following frequency bands be used for the medical telemetry service: 608–614 MHz, 1385–1390 MHz and 1432–1435 MHz.

12. We note that other parties have expressed an interest in operating in portions of the 1300 MHz and 1400 MHz bands adjacent to the frequencies recommended by AHA. For example the Land Mobile Communications Council (LMCC) has filed a petition for rule making to allocate the 1390–1400 MHz and 1427–1432 MHz bands for private land mobile services under part 90 of the rules. In addition, several licensees of low earth orbit (''Little Leo'') satellite systems have been performing studies on the feasibility of operating satellite feeder uplinks in the 1390–1393 MHz band and downlinks in the 1429–1432 MHz band in an effort to obtain an international frequency allocation for this purpose. A discussion of the frequency bands recommended by AHA and the adjacent bands noted above follows. We request comment on the impact that a frequency allocation for medical telemetry would have on other prospective users of these bands.

13. We tentatively conclude that it is necessary to allocate spectrum where medical telemetry equipment can operate on a primary basis. The 608–614 MHz band appears to be suitable, because, other than radio astronomy, it is only used for medical telemetry under part 15 of the rules. Accordingly, we propose to allocate this band to medical telemetry equipment on a co-primary basis with radio astronomy. Under this proposal, operation in this band must not cause interference to radio astronomy operations, and users will be required to coordinate their operation with radio astronomy facilities.

14. While we make no finding regarding NTIA's assertion that the 1385–1390 and 1432–1435 MHz bands must be made available through auction, in order to expedite this proceeding we propose to identify spectrum in the 1390–1400 MHz and 1427–1432 MHz bands for medical telemetry equipment. The medical telemetry allocation would be primary to provide protection from interference, but would be non-exclusive. If an international allocation for Little Leo feeder links were made in the future, we could initiate a proceeding to domestically allocate medical telemetry on a co-primary basis with Little Leo feeder links, although medical telemetry equipment would continue to receive protection from interference. We have devised two possible options for a medical telemetry frequency allocation, which are discussed below. We seek comment on which option is more suitable, or

whether any other alternative frequencies would be more suitable.

15 *Option 1: 608–614 MHz/1395–1400 MHz/1429–1432 MHz.* The 1395–1400 MHz band could be allocated for medical telemetry equipment as an alternative to the 1385–1390 band recommended by AHA. Allocating this band would provide the same amount of spectrum AHA requested in the adjacent band, and would increase the frequency separation from government radars operating below 1385 MHz, thereby reducing the risk of interference to medical telemetry equipment. Also, the 1429–1432 MHz band could be allocated as an alternative to the 1432–1435 MHz band recommended by AHA. This would provide the same amount of spectrum as requested by AHA in the adjacent band, and the frequency separation between it and the 1395–1400 MHz band could make them more useful for two-way communications. However, this option would use the 1429–1432 MHz band that the Little Leo satellite operators are investigating for satellite feeder downlinks, as well as parts of the frequency bands requested by LMCC in their petition. Commenters should address the sharing possibilities and criteria for sharing between Little LEOs and medical telemetry under this option.

16. *Option 2: 608–614 MHz/1391–1400 MHz.* A single band at 1391–1400 MHz could be allocated to medical telemetry equipment as an alternative to the upper two bands recommended by AHA. This would provide an additional 1 MHz of spectrum for medical telemetry. The larger contiguous band could provide a greater opportunity for broadband transmissions, although it may be less useful for two-way communications than two separate bands. This option would resolve the potential conflict with satellite downlinks in the 1429–1432 MHz band, but would result in 2 MHz of overlap between the proposed medical telemetry band and a possible 1390–1393 MHz satellite feeder uplink band. This option would also use parts of the frequency bands requested by LMCC in their petition. Commenters should address the sharing possibilities and criteria for sharing between Little LEOs and medical telemetry under this option.

17. We propose service rules for the new Wireless Medical Telemetry Service (WMTS). These proposed service rules only apply to the WMTS and not to the current medical telemetry operations under parts 15 and 90. The proposed rules include licensing requirements and technical standards for the equipment, as well as a frequency coordination procedure. Our proposals are based primarily upon recommendations in the AHA report submitted to the Commission. We request comment on all aspects of these proposed rules.

18. AHA proposes the following definition for medical telemetry: Wireless medical telemetry is defined as the measurement and recording of physiological parameters and other patient-related information via radiated bi-or unidirectional electromagnetic signals.

19. Our intention is to create a Wireless Medical Telemetry Service (WMTS) that will allow medical telemetry equipment to operate in hospitals and medical facilities in much the same manner as the part 15 and part 90 rules allow, but without the potential for interference. Because the definition proposed by AHA appears to encompass our intention in creating this service, we propose it as the definition of the medical telemetry, and request comment.

20. *Licensing.* Medical telemetry equipment operating under part 15 of the rules does not require an individual operator's license. Similarly, medical telemetry equipment operating pursuant to part 90 does not require an individual operator's license. AHA states that, given the number and nature of devices that could be operated in a new medical telemetry service and the number of separate licenses that could co-exist in a given area, there is no basis for the administrative burden of individual licenses. AHA suggests that equipment in the WMTS could be ''licensed by rule'', such as is done in the Family Radio Service. We tentatively concur in AHA's assessment that there is no need to require individual operators licenses in the new WMTS. Individual licensing is generally designed to give a licensee a protected service area, and thus establishes rights among competing entities in the same service. We do not envision that operators in the WMTS will be in competition with each other as are parties in other radio services. Under our proposal, the WMTS spectrum would be shared, and there would be no mutual exclusivity between users. We therefore propose that the WMTS exist as one of the Citizen's Band services contained in part 95 of the rules. The Commission has authority under Section 307(e) of the Communications Act to license the Citizen's Band services by rule and to define ''citizen's band radio service'' by rule. We seek comment on our tentative conclusion.

Eligibility. AHA proposes that only authorized health care professionals be eligible to operate transmitters in the WMTS. For the purpose of this service, an ''authorized health care professional'' would be defined as (1) a physician or other individual authorized under state or federal law to provide health care services; (2) a health care facility operated by or employing individuals authorized under state or federal law to provide health care services; or (3) any trained technician under the supervision and control of an individual or health care facility authorized under state or federal law to provide health care services. AHA suggests that we define a ''health care facility'' as a hospital or other establishment that offers services, facilities and beds for use beyond 24 hours in rendering medical treatment, and organizations regularly engaged in providing medical services through clinics, public health facilities and similar establishments, including government entities and agencies for their own medical activities. A health care facility would not include an ambulance or other moving vehicle. We propose the eligibility restrictions recommended by AHA to ensure that use of the allocated spectrum is limited to medical telemetry equipment. However, for the sake of clarity, we will change the term ''authorized health care professional'' to ''authorized health care *provider*'', and change ''beyond 24 hours'' to ''beyond a 24 hour period''. We seek comment on this proposed eligibility requirement, including whether it should be expanded to cover in-home medical uses and how it can be enforced without individual licensing.

22. *Frequency Coordination.* AHA notes that if the WMTS were ''licensed-by-rule'', there would be no record of which frequencies are used by each facility or device. This could result in interference if multiple parties located close together attempt to use the same frequencies. Accordingly, AHA recommends the appointment of a frequency coordinator, who will maintain a database of all WMTS equipment in operation. The database would be used by eligible users and manufacturers to plan for specific frequency use within a geographic area, especially where numerous WMTS operations may occur. Equipment registered first in a geographic area would be entitled to protection over later-registered equipment. We preliminarily agree that AHA's proposal would assist WMTS users in avoiding interference. Accordingly, we propose that all parties using equipment in the WMTS be required to coordinate their operating frequency and other relevant technical operating parameters with a

coordinator designated by the Commission. We seek comment on this proposal.

23. Specifically, we propose that the designated frequency coordinator would have responsibility to maintain an accurate engineering database of all WMTS transmitters, identified by location, operating frequency, emission type and output power. The frequency coordinator, though, would not be a decision maker as to which frequency should be used. The coordinator would notify users of potential frequency conflicts. We expect that there will be few conflicts between users of WMTS equipment due to its low operating power, and that users will be able to resolve any conflicts among themselves. The Commission would make the final decision, as necessary, in disputes between users. We propose that a single frequency coordinator be designated to handle all requests nationwide. The coordinator must be familiar with the medical telemetry user community, and must make its services available to all parties on a first-come, first-served and non-discriminatory basis. The frequency coordinator must be willing to serve a five year term, which could be renewed by the Commission. In the event that a frequency coordinator did not wish to continue at the end of its term, it would have to transfer its database to another designated entity. The Wireless Telecommunications Bureau would have delegated authority to select the coordinator, and would announce this selection by public notice. We seek comments on this proposal, including: (1) Any other qualifications that a frequency coordinator must have, (2) whether a single entity or multiple entities should be designated as frequency coordinator(s), (3) how the frequency records could be maintained with multiple coordinators, and, (4) whether we should limit the fees the frequency coordinator(s) can charge. We also invite parties interested in becoming a frequency coordinator for the WMTS to file a written statement describing their qualifications.

24. The frequency coordinator would be required to maintain a database of the operating parameters submitted to it by users of the WMTS. We propose to require that the frequency coordinator make the database available to WMTS users, equipment manufacturers and the public. AHA recommends that the information submitted to the coordinator include:

(1) Frequency range(s) used
(2) Modulation scheme used
(3) Effective radiated power
(4) Number of transmitters in use at the health care facility at the time of registration
(5) Legal name of the authorized health care provider
(6) Location of transmitter (coordinates, street address, building)
(7) Point of contact for the authorized health care provider.

We seek comment on these and any other possible information requirements.

25. AHA recommends that equipment registrations be effective for a term of five years, and may be renewed for additional five year terms. Health care providers would have to notify the frequency coordinator when a device is permanently taken out of service, unless it is replaced with one with the same technical characteristics. Health care providers would also be expected to notify the frequency coordinator of any change in location or other operating parameters. We propose to adopt these requirements, except for the more burdensome requirement that equipment registrations be renewed every five years. We seek comment on these proposals, in particular, whether an expiration date for equipment registration is necessary to ensure the database does not become ''cluttered'' with entries for equipment that is no longer in service if users fail to notify the coordinator of the cessation of operation. We also seek comment on who should have access to the database.

26. *Permissible communications.* AHA recommends that all types of information flows should be permissible in the service, including voice, data, video and telecommand, on both a unidirectional and bidirectional basis. We are concerned, however, about AHA's recommendation to allow voice and video transmissions in the WMTS. Allowing voice transmissions could encourage equipment in this service to be used as a form of wireless intercom, rather than for its intended purpose of transmitting vital patient data. Further, video transmissions could occupy a significant portion of the available spectrum for this service. Accordingly, we propose that the WMTS be used for all types of communication, except voice or video transmissions, on either a uni-or bi-directional basis. We seek comments on these proposals.

27. *Technical Standards.* AHA recommends that the Commission adopt only minimal technical standards for WMTS equipment. AHA states that this flexibility will encourage manufacturers to develop different applications for medical telemetry. AHA does not believe that the lack of standards will lead to inefficient uses of the band. On the contrary, it believes that allowing the industry to move forward without government standards will result in a high degree of innovation. We seek comment on this general approach, and whether the Commission should adopt more specific requirements for certain parameters (e.g.—spectral efficiency.)

28. AHA generally does not recommend a specific channelization scheme for these bands. However, it is concerned that the use of broadband technologies, such as spread spectrum, could allow a single user to monopolize a band, which could inhibit the ability of other health care facilities within an area to utilize narrowband technologies. To facilitate sharing of the spectrum, it recommends that broadband equipment operating in the 608–614 MHz band be capable of operating within one or more channels of 1.5 MHz each, up to a maximum of 6 MHz. Such equipment would operate on the minimum number of channels necessary, and must have the capability of being ''throttled back'' so it will occupy as little as one 1.5 MHz channel, if necessary, to allow multiple users to share that band. We are proposing these requirements, which we believe will allow the WMTS spectrum to be used efficiently. We seek comment on these proposals.

29. AHA recommends the following field strength limits for WMTS transmitters.

Frequency band	Maximum field strength	Measurement distance	Measurement bandwidth	Detector function
608–614 MHz	370 mV/m	3 meters	120±20 kHz	CISPR QP.
1385–1390 MHz	740 mV/m	3 meters	1 MHz	Average.
1432–1435 MHz	740 mV/m	3 meters	1 MHz	Average.

We note that the proposed limit in the 608–614 MHz band is approximately 5 dB higher than the current part 15 limit for equipment operating in this band. AHA does not provide a justification as to why the limit should be increased, and we are concerned that a higher limit could result in interference to radio astronomy. Accordingly, we propose to maintain the current part 15 limit in the 608–614 MHz band. We propose the higher limits recommended by AHA in the 1395–1400 MHz and 1429–1432 MHz bands (or in the alternatively proposed 1391–1400 MHz band) to offset the increased propagation losses at those frequencies. We request comment on the appropriateness of these proposed limits. Commenters who suggest alternatives to the frequency bands proposed in this Notice should address the issue of appropriate limits in those alternative bands.

30. AHA recommends the following out-of-band emission limits for transmitters in the WMTS.

Frequency band	Maximum field strength	Measurement distance	Measurement bandwidth	Detector function
608–614 MHz	200 μV/m	3 meters	120± 20 kHz	CISPR QP.
1385–1390 MHz	500 μV/m	3 meters	1 MHz	Average.
1432–1435 MHz	500 μV/m	3 meters	1 MHz	Average.

These are the same as the current part 15 limits for out-of-band emissions from most intentional radiators, which we believe to be effective at controlling interference. Accordingly, we are proposing AHA's recommended limits for the 608–614 MHz band, and for the 1395–1400 MHz and 1429–1432 MHz bands (or the alternatively proposed 1391–1400 MHz band). We request comment on the appropriateness of these limits. Commenters who suggest alternatives to the frequency bands proposed in this Notice should address the issue of appropriate limits in those alternative bands.

31. *Protection of other existing services.* The WMTS must not cause interference to radio astronomy operations, and to certain ''grandfathered'' government operations. We therefore propose rules requiring the coordination of WMTS operations in the 608–614 MHz band with radio astronomy operations, similar to the requirements in part 15. The proposed rules would also require that operation in the 1395–1400 MHz and 1429–1432 MHz bands (or the alternatively proposed 1391–1400 MHz band) must protect certain government operations. Finally, parties using WMTS equipment would need to be aware that the operation of transmitters in close proximity to medical equipment could cause interference to the operation of the medical equipment. The proposed rules would provide a warning to this effect, similar to the warning found in the part 15 rules for medical telemetry equipment. Commenters who suggest alternatives to the frequency bands proposed in this Notice should address the need to protect other existing services.

32. *Equipment authorization requirement.* AHA recommends that WMTS transmitters be authorized through the Declaration of Conformity (DoC) procedure in part 2 of the rules. AHA also recommends that the manufacturer be required to provide certain technical information to the user in addition to the other information required as part of the DoC process. DoC is a manufacturer's self-approval procedure where the equipment is tested to ensure it complies with the Commission's specified technical standards, and may then be marketed without an approval by the Commission. We believe that DoC is an appropriate authorization for WMTS equipment. The equipment is relatively low powered, and will operate in a band reserved exclusively for medical telemetry equipment, with the exception of a limited number of fixed government operations. There is therefore less concern about the equipment causing interference than would be the case if the band were shared with other services. Accordingly, we propose that medical telemetry equipment operating under the new WMTS be authorized through the DoC procedure. We also propose that laboratories accredited to perform DoC testing under part 15 of the rules be permitted to perform DoC testing for equipment in the new WMTS, since the measurement procedures are essentially the same for both types of equipment. However, we would decline to require manufacturers to provide users certain technical information AHA recommends as part of the DoC process. We believe manufacturers would already provide this information as a routine matter, so a requirement on our part is unnecessary. We seek comments on these proposals, and whether certification would be appropriate due to the fact that new types of equipment may be developed for this service.

33. *Transition Provisions.* AHA believes that eventually all medical telemetry equipment should be designed to operate in the new frequency bands. AHA estimates it will take manufacturers approximately three to four years to develop and market devices for these bands. Therefore, they recommend that all equipment approved, beginning four years after adoption of final rules, should be designed to operate in the new frequency bands. AHA further recommends that equipment approved prior to that date can continue to be manufactured, marketed and operated indefinitely so that health care facilities are not forced to replace devices that are still useful.

34. While our primary goal in this proceeding is to protect the operation of medical telemetry equipment from harmful interference, we need to balance that with the goal of allowing DTV and PLMR to grow and develop without unnecessary delays. In that regard, we believe that four years is a longer transition period than necessary for requiring new equipment to operate in the new frequency bands. Equipment operating in the 608–614 MHz band is already available under the provisions of part 15, and AHA has indicated that equipment can be rapidly developed for the other proposed bands. In order to encourage users to migrate out of the DTV and PLMR bands as quickly as possible, we propose that, beginning two years from the effective date of final rules in this proceeding, all medical telemetry equipment authorized must operate in the new frequency bands. Equipment that is already in operation in the DTV and PLMR bands as of that date may continue to be operated, but at the users' own risk. We seek comment on these proposals, including whether we should place a cutoff date on the manufacturing and importation of equipment authorized under parts 15 and 90.

35. AHA also is concerned that the Commission may lift the freeze on high-power operation on the 12.5 kHz offset channels in the 450–470 MHz band. It

states that a five-year transition period starting from the adoption of rules allocating spectrum for medical telemetry equipment is necessary to avoid disastrous consequences to existing users. AHA states that a shorter transition time may be possible in parts of the band, either by relocating existing users or identifying channels which are not used by medical telemetry devices. We seek comment on AHA's 5-year proposal, and on what steps may be taken to allow an earlier lifting of the freeze in the 450–470 MHz band without causing interference to medical telemetry equipment.

Initial Regulatory Flexibility Analysis

36. As required by Section 603 of the Regulatory Flexibility Act, 5 U.S.C. 603, the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the 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 for comments on the NPRM provided above. The Commission will send a copy of this NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with paragraph 603(a) of the Regulatory Flexibility Act.

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

37. Medical telemetry equipment currently operates on an unlicensed basis on certain unused TV channels under part 15 of the rules, and on a secondary basis to private land mobile services in the 450–470 MHz band under part 90 of the rules. With the transition to digital TV service, both full-power and low-power TV stations may begin operating on some of the vacant channels used by medical telemetry equipment. In addition, the new channelization scheme being implemented in the 450–470 MHz band will allow high-power operation on the channels currently reserved for low-power use where medical telemetry equipment operates. Both of these changes could result in severe interference with medical telemetry equipment. The proposed rules are intended to allocate new frequency bands where medical telemetry equipment can operate on a primary basis without receiving interference.

B. Legal Basis

38. The proposed action is authorized under Sections 4(i), 301, 302, 303(e), 303(f), 303(r), 304 and 307 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 301, 302, 303(e), 303(f), 303(r), 304 and 307.

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

39. Under the RFA, small entities may include small organizations, small businesses, and small governmental jurisdictions. 5 U.S.C. 601(6). The RFA, 5 U.S.C. 601(3), generally defines the term ''small business'' as having the same meaning as the term ''small business concern'' under the Small Business Act, 15 U.S.C. 632. 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''). This standard also applies in determining whether an entity is a small business for purposes of the RFA.

40. The Commission has not developed a definition of small entities applicable to RF Equipment Manufacturers. Therefore, the applicable definition of small entity is the definition under the SBA rules applicable to manufacturers of ''Radio and Television Broadcasting and Communications Equipment.'' According to the SBA's regulation, an RF manufacturer must have 750 or fewer employees in order to qualify as a small business.[1] Census Bureau data indicates that there are 858 companies in the United States that manufacture radio and television broadcasting and communications equipment, and that 778 of these firms have fewer than 750 employees and would be classified as small entities.[2] We believe that many of the companies that manufacture RF equipment may qualify as small entities.

41. According to the SBA's regulations, nursing homes and hospitals must have annual gross receipts of $5 million or less in order to qualify as a small business concern. 13 CFR 121.201. There are approximately 11,471 nursing care firms in the nation, of which 7,953 have annual gross receipts of $5 million or less.[3] There are approximately 3,856 hospital firms in the nation, of which 294 have gross receipts of $5 million or less. Thus, the approximate number of small confined setting entities to which the Commission's new rules will apply is 8,247.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

42. We are proposing that equipment operating in the new frequency bands be authorized through the Declaration of Conformity (DoC) procedure. DoC is a manufacturer's self-approval procedure, in which the manufacturer has the equipment tested at an accredited laboratory, and is then permitted to market the equipment without a Commission approval provided the equipment complies with the applicable technical requirements. The DoC procedure requires the manufacturer to supply a compliance statement with each product, and to retain test records.

43. Parties operating the equipment will not be required to obtain an individual operator's license from the Commission, but they will have to register with a frequency coordinator designated by the Commission. The information submitted to the frequency coordinator will be:

(1) Frequency range(s) used;

(2) Modulation scheme used;

(3) Effective radiated power;

(4) Number of transmitters in use at the health care facility as of the date of coordination;

(5) Legal name of the authorized health care provider;

(6) Location of transmitter (coordinates, street address, building);

(7) Point of contact for the authorized health care provider (name, title, office).

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

44. We are proposing to allow equipment in this service to be ''licensed by rule''. This will eliminate the expense and delays that would result if parties were required to obtain individual operators' licenses. We are also proposing that equipment in this service be authorized through the Declaration of Conformity procedure. This will eliminate the delays in getting equipment to market that would result if manufacturers were required to obtain certification through the Commission or a designated Telecommunication Certification Body.

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[1] *See* 13 CFR 121.201, Standard Industrial Classification (SIC) Code 3663.

[2] *See* U.S. Department of Commerce, 1992 Census of Transportation, Communications and Utilities (issued May 1995), SIC category 3663.

[3] *See* Small Business Administration Tabulation File, SBA Size Standards Table 2C, January 23, 1996, SBA, Standard Industrial Code (SIC) categories 8050 (Nursing and Personal Care Facilities) and 8060 (Hospitals). (SBA Tabulation File)

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

45. None.

List of Subjects in 47 CFR Parts 2 and 95

Communications equipment.

Federal Communications Commission.

William F. Caton,

Deputy Secretary.

[FR Doc. 99–19707 Filed 7–30–99; 8:45 am]

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FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 15

[ET Docket 99–254; FCC 99–180]

Closed Captioning Requirements for Digital Television Receivers

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: This document proposes to amend the Commission's rules to adopt technical standards for the display of closed captions on digital television (DTV) receivers. The Commission also proposes to require the inclusion of closed captioning decoder circuitry in DTV receivers. The proposals contained herein will help ensure access to digital programming for people with disabilities. This action is taken to fulfill the Commission's obligations contained in the Television Decoder Circuitry Act of 1990.

DATES: Comments must be filed on or before October 18, 1999, and reply comments must be filed on or before November 15, 1999.

ADDRESSES: Address all comments concerning this proposed rule to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 445 12th Street S.W., Washington, D.C. 20554.

FOR FURTHER INFORMATION CONTACT: Neal McNeil, Office of Engineering and Technology, (202) 418–2408, TTY (202) 418–2989, e-mail: nmcneil@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's *Notice of Proposed Rule Making*, ET Docket 99–254, FCC 99–180, adopted July 14, 1999, and released July 15, 1999. The full text of this document is available for inspection and copying during regular business hours in the FCC Reference Center, (Room TW–A306) 445 12th Street S.W., Washington, DC. The complete text of this document also may be purchased from the Commission's duplication contractor, International Transcription Service, Inc., (202) 857–3800, 1231 20th Street, NW, Washington, DC 20036.

Electronic Access and Filing Addresses

Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) via the Internet at <http://www.fcc.gov/e-file/ecfs.html>. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, ''get form <your e-mail address>.'' A sample form and directions will be sent in reply.

Summary of Notice of Proposed Rulemaking

1. Closed captioning is an assistive technology that allows persons with hearing disabilities to enjoy television programming. Through captioning, the audio portion of programming is displayed as text superimposed over the video. Closed captioning information is encoded and transmitted along with the video signal of television broadcasts. The text is not ordinarily visible. In order to display closed captioning, viewers must use either a set-top decoder or a television receiver with integrated decoder circuitry.

2. In 1990, Congress passed the Television Decoder Circuitry Act. The Act was intended to reduce the cost to consumers of receiving closed captioning, to make closed captioning more widely available, and to create market incentives for broadcasters to invest in and provide more captioned programming. The Act requires that television receivers with picture screens 33 cm (13 inches) or larger contain built-in decoder circuitry designed to display closed captioned television transmissions. The Act also requires that the Commission take appropriate action to ensure that closed captioning services continue to be available to consumers as new video technology is developed. The introduction of digital broadcasting now requires the Commission to update its rules to fulfill its continuing obligations under the Act.

3. The Electronics Industries Alliance (EIA) has adopted EIA–708–A, a standard which provides instructions for the encoding, delivery, and display of closed caption information for digital television systems. The standard provides for a larger set of captioning characters than the existing caption standard. It also supports user options which enable caption display to be customized for a particular viewer. For example, closed caption decoders functioning pursuant to EIA–708–A may permit viewers to change various attributes of caption text such as its font, spacing, color, or screen position. This will allow viewers to change the size and appearance of captions to suit their needs. Also, using EIA–708–A, caption providers may distribute the caption text for a particular program at different reading levels. Viewers would then have the option of displaying the standard near-verbatim captions or alternate ''easy-reader'' captions written for younger viewers or beginner readers. Captions for that same program may also be distributed in alternate languages, simultaneously. We believe that, because of these attributes, EIA–708–A provides substantial benefits for consumers, and substantial improvements over current captioning standards.

4. The Commission proposes to incorporate Section 9 of EIA–708–A into the Commission's rules. That section contains recommendations for the operation of DTV closed captioning decoders. The recommendations are intended to provide minimum performance standards for DTV caption decoders. Because Section 9 supplies manufacturers with a set of common basic functions for DTV caption decoders, we believe that it provides sufficient guidance for the successful implementation of closed caption services with digital television receivers. We propose to transcribe the recommendations contained in Section 9 into requirements that will be contained in part 15 of the Commission's rules. DTV receivers will be required to function pursuant to the recommendations contained therein.

5. During the transition period from analog to digital broadcasting, programming will be transmitted in both analog and digital formats. Accordingly, the first few generations of DTV receivers are expected to be designed to operate in a dual mode. Dual mode receivers will allow consumers to enjoy the enhanced quality of digital broadcast stations while retaining the ability to watch programming on existing analog stations, all with the same receiver. For this type of receiver we believe that it is important to ensure that closed captioning display capability is available in both modes of operation. Accordingly, we propose to require that dual mode receivers operating in the analog mode provide closed captioning functionality pursuant to the Commission's existing rules for analog television receivers. In the digital mode,