

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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In the Matter of)
)
Itron, Inc.)
Petition For Rulemaking)
)
Amendment of Part 2 and Part 90 of the)
Commission's Rules to Allocate the)
1427-1432 MHz Band for Automatic Meter)
Reading and Utility Telemetry Use)

RM No. 9854

COMMENTS OF THE AMERICAN HOSPITAL ASSOCIATION
TASK FORCE ON MEDICAL TELEMETRY

The American Hospital Association Task Force on Medical Telemetry ("the AHA Task Force"), by its attorneys and pursuant to Section 1.405 of the Commission's rules, hereby files its comments on the above-referenced petition for rule making ("Petition") filed by Itron, Inc. ("Itron"). The Petition requests the allocation of the 1427-1432 MHz band on a primary basis for automated meter reading and utility telemetry operations ("AMR"). The allocation of portions of this band, however, currently is under consideration by the Commission for the proposed Wireless Medical Telemetry Service ("WMTS").¹ In fact, the AHA Task Force already has commenced discussions with Itron to discuss spectrum sharing possibilities and hereby expresses its commitment to work cooperatively to further these efforts. Because, however, the need for an expedited spectrum allocation to WMTS is urgent and because the pleading cycle in the WMTS proceeding already has been completed, the Commission should not delay decision on the

¹ See Amendment of Parts 2 and 95 of the Commission's Rules to Create a Wireless Medical Telemetry Service, ET Docket No. 99-255, Notice of Proposed Rule Making, 14 FCC Rcd 16719 (1999) ("WMTS NPRM").

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WMTS NPRM before initiating action on Itron's Petition. There is no reason to delay action on the WMTS rule making in light of the AHA Task Force's commitment to work cooperatively with Itron to develop a workable spectrum sharing plan for the 1427-1432 MHz band.

I. The Wireless Medical Telemetry Community Has Pressing Needs for Prompt Resolution of the WMTS Rule Making.

Health care institutions around the country extensively and increasingly utilize wireless medical telemetry equipment for monitoring patient conditions. Among the many benefits of such monitoring is the ability for health care professionals to quickly detect and address life-threatening conditions. Wireless monitoring also promotes greater patient mobility, thus allowing accelerated recovery periods, and helps to contain medical costs by reducing the number of health care workers needed for patient monitoring.

Regulatory changes affecting the spectrum bands used for wireless medical telemetry, however, have had the effect of increasing the potential for interference to wireless medical telemetry operations. For example, wireless medical telemetry operations are permitted on a secondary basis in the 450-470 MHz band.² However, these devices are subject to increased interference due to the new channeling scheme adopted by the Commission for this band, which will allow high power operations on the same channels used for wireless medical telemetry.³

Unlicensed medical telemetry operations also are currently permitted in unutilized

² See 47 C.F.R. §§ 90.238, 90.267.

³ See *Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them and Examination of Exclusivity and Frequency Assignment Policies of the Private Land Mobile Radio Services*, PR Docket No. 92-235, *Report and Order and Further Notice of Proposed Rule Making*, 10 FCC Rcd 10076 (1995).

television broadcasting channels, but only on a secondary basis.⁴ In response to Commission decisions requiring television broadcasters to transition from analog to digital operations, television stations have begun broadcasting digital signals in these formerly unused television broadcasting channels, posing a substantial threat of interference to existing medical telemetry operations. Indeed, as noted by the Commission, in March 1998 a television station in Texas began to test digital operations on a previously unused channel, causing severe interference to medical telemetry equipment at a nearby hospital complex.⁵

In the WMTS NPRM, the Commission proposed to allocate spectrum for wireless medical telemetry on a primary or co-primary basis in order to minimize the potential for harmful interference between medical telemetry devices and other services.⁶ The pleading cycle in that proceeding is complete, and no party has seriously questioned the need for or the urgency of a primary allocation to the WMTS. Thus, it is important that the Commission adopt the WMTS rules as quickly as possible in order to meet current and future wireless medical telemetry requirements and to maximize the potential benefits of wireless medical telemetry.

II. The WMTS Proceeding Involves Spectrum Allocation Issues That Can — And Must — Be Resolved Prior to Addressing Itron’s Petition.

During the course of the WMTS rule making, various spectrum allocation options were considered for the WMTS, including the potential allocation of portions of the 1427-1432 MHz band that is the subject of Itron’s Petition. The record developed on the issue of determining

⁴ See 47 C.F.R. § 15.242.

⁵ WMTS NPRM, 14 FCC Rcd at 16722.

⁶ *Id.* at 16723, 16726-16727.

appropriate spectrum for the WMTS reflects a balancing of a number of factors, including the bandwidth requirements for medical telemetry, the availability of frequencies that can be allocated on a primary or co-primary basis for the WMTS, the impact of current and anticipated government operations in co-channel and adjacent channels, and the spectrum interests of other wireless services.

To assist the Commission, the AHA Task Force conducted a study to determine on a conservative basis both short-term and long-term bandwidth requirements. The study took into account such factors as the actual medical telemetry services that hospitals require, the anticipated increase in both the number of patients and types of conditions to be monitored by wireless medical telemetry equipment, and reasonable time frames for hospitals to implement such services. As a result, the AHA Task Force determined that 6 MHz of bandwidth is required for immediate and short-term needs and that an additional 8 MHz or more will be needed to satisfy future medical telemetry requirements.

The AHA Task Force initially had recommended that the 608-614 MHz (TV channel 37), 1385-1390 MHz, and 1432-1435 MHz bands be allocated for the WMTS. The 608-614 MHz lower band allocation was suggested because wireless medical telemetry equipment is already commercially available for such frequencies, and (because of the need to share with radio astronomy) the band generally has a low level of background noise. However, this lower band allocation alone is not sufficient to meet either the short-term or long-term spectrum needs of the WMTS. First, the geographic availability of this band is limited; it cannot be utilized in radio astronomy quiet zones or where digital television use of channels 36 and 38 may cause adjacent

channel interference to WMTS use of channel 37. Second, in terms of total bandwidth, 6 MHz simply is not adequate to meet the growth demands for wireless medical telemetry services.

Thus, the AHA Task Force concluded that an upper band allocation in the 1.4 GHz band is essential if wireless medical telemetry is to have adequate spectrum for both short-term and long-term needs. The AHA Task Force requested the upper band allocation be split (1385-1390 MHz and 1432-1435 MHz) to facilitate the development of two-way command and telemetry transmission capability.

In the WMTS NPRM issued in July 1999, the FCC tentatively concurred that medical telemetry operations require primary status. It proposed two options for frequency allocations, each of which, consistent with the AHA Task Force's recommendations, consists of at least 14 MHz.⁷ The Commission proposed allocating to the WMTS the 608-614 MHz band as suggested by the AHA Task Force, but it declined to propose the upper band allocation recommended by the AHA Task Force because of the potential for interference from government radar operations operating below 1385 MHz and because of NTIA concerns that the 1432-1435 MHz band must be assigned through auction.⁸ The Commission instead proposed as "Option 1" the following upper band allocation: 1395-1400 MHz and 1429-1432 MHz.⁹ In its initial and reply comments on the WMTS NPRM, the AHA Task Force recommended adoption of Option 1 but also offered an alternative scheme under which the 608-614, 1394-1400, and 1427-1429 MHz bands might be

⁷ WMTS NPRM at 16726-16727.

⁸ *Id.* at 16727.

⁹ *Id.*

allocated for WMTS.¹⁰

Itron filed both initial and reply comments in the WMTS proceeding. It stated that the WMTS cannot be accommodated within the 1427-1432 MHz band without jeopardizing the continued operations of its meter reading services.¹¹ Indeed, the AHA Task Force subsequently has confirmed that Itron's operations on the same channels in the same geographic area would cause harmful interference to relatively low power wireless medical telemetry equipment.

On February 24, 2000, Itron filed the instant Petition. Itron explains that in 1993 the Commission granted it a developmental license for the 1427-1429 MHz band (which was allocated on a primary basis for government use) to conduct AMR operations. Although the Commission had not initiated formal rule making proceedings to reallocate the spectrum for non-government use, the Commission later converted Itron's license to a nationwide authorization for the 1427-1432 MHz band, secondary to government operations. Itron now requests the allocation of the 1427-1432 MHz band on a primary basis for AMR.

Although Itron and the AHA Task Force generally agree that the same frequencies could not be shared in the same geographic locations, Itron has expressed its belief that it should be possible for AMR to share this band with wireless medical telemetry. Itron Petition at 12. The AHA Task Force agrees that some sharing of the band as a whole appears feasible and may provide more flexibility in those areas where AMR demand is not substantial. To explore this,

¹⁰ See Comments of the AHA Task Force in ET Docket No. 99-255, at 11-12. Comments were due September 16, 1999, and Reply Comments were due October 18, 1999.

¹¹ See Comments of Itron, Inc. in ET Docket No. 99-255, at 3; Reply Comments of Itron, Inc. at 1-2.

the AHA Task Force has begun discussing spectrum sharing possibilities with Itron. Although these discussions have not been concluded, the possibilities for WMTS and AMR to share in the same geographic locations by informally (or at some point with Commission action, more formally) allocating frequencies between the two services appear promising.¹² Thus, the AHA Task Force expresses its commitment to work cooperatively with Itron and other AMR entities to develop a spectrum sharing plan for consideration by the Commission in the near future.

However, the record is complete in the WMTS rule making and a primary allocation to WMTS is urgently needed for purposes of patient care. The Commission must not delay issuing a decision in the WMTS proceeding while a co-primary AMR allocation is being considered. Specifically, in light of the threats of harmful interference to wireless medical telemetry operations that may have a significant adverse impact on patient safety, the Commission must not defer allocating at least 14 MHz of lower band and upper band frequencies to the WMTS. Notwithstanding that the Commission completed an initial allocation to WMTS, it can consider Itron's Petition and the anticipated band sharing plan on an expedited basis in a subsequent action.

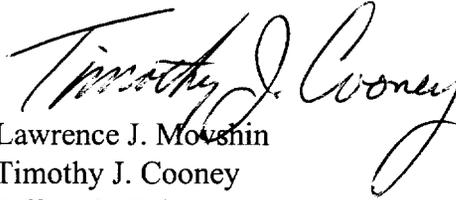
¹² Such a geographic sharing plan, of course, would require the Commission to allocate WMTS the entire 1427-1432 MHz band on a co-primary basis even though at most only 2 to 3 MHz of bandwidth would be useable by WMTS in a given location.

IV. Conclusion

As demonstrated above, the Commission should take prompt action in the WMTS docket, where the record is complete, while it considers the merits of Itron's Petition.

Respectfully submitted,

**AMERICAN HOSPITAL ASSOCIATION
TASK FORCE ON MEDICAL TELEMETRY**



Lawrence J. Moushin
Timothy J. Cooney
Jeffrey S. Cohen

Wilkinson Barker Knauer, LLP
2300 N Street, NW
Washington, DC 20037

(202) 783-4141

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CERTIFICATE OF SERVICE

I, Felicia Lane, hereby certify that copies of the foregoing Comments have been served on the following persons by facsimile and U.S. mail/hand delivery this 22nd day of May, 2000.

Henry Goldberg
Goldberg, Godles, Wiener & Wright
1229 Nineteenth Street, N.W.
Washington, D.C. 20026

Dale Hatfield*
Chief, Office of Engineering and Technology
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Julius Knapp*
Chief, Policy and Rules Branch
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Karen Radley*
Chief Technical Rules Branch
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554


Felicia Lane

*Hand Delivery