

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

In the Matter of)	
)	
Reallocation of the 216-220 MHz,)	
1390-1395 MHz, 1427-1429 MHz,)	ET Dkt. No. 00-221
1429-1432 MHz, 1432-1435 MHz,)	RM-9854
1670-1675 MHz, and 2385-2390 MHz)	
Government Transfer Bands)	

COMMENTS OF ITRON, INC.

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SUMMARY

In these Comments, Itron supports the plan the Commission identifies as Option 2, with one modification. As proposed, Option 2 would allocate 1427-1429 MHz on a primary basis to utility telemetry, and would allocate 1429-1432 MHz on a co-primary basis to utility telemetry and wireless medical telemetry. Itron asks instead that the entire 1427-1432 MHz band be allocated on a co-primary basis to utility telemetry and wireless medical telemetry, which would share the band in accordance with a Joint Statement of Position agreed to by utility telemetry and wireless medical telemetry representatives.

Itron has been licensed to use the 1427-1432 MHz band for automatic meter reading (“AMR”) and other utility telemetry purposes since the early 1990s. AMR technologies improve dramatically the accuracy and reliability of meter reading. One only has to read the headlines about the California energy crisis to understand the importance of a real-time, efficient means of communications between a utility and its customers regarding energy use.

AMR technologies are at least twenty times more efficient than conventional methods for meter reading. In the case of two-way systems such as Itron’s 1427-1432 MHz systems, they establish a direct link between utility and customer, making it possible to reduce peak demand and shift usage to off-peak hours, as well as encourage conservation by providing customers with detailed, real-time price, consumption and outage information. The efficiencies generated by AMR systems have become increasingly important as the utility industry is deregulated and access to competing utility service providers spreads.

Without doubt, 1427-1432 MHz is the best home for utility telemetry. Operation of utility telemetry is compatible with federal government users, who will continue to operate in the 1427-1432 MHz band for several years. It also can co-exist with the radio astronomy service, which will remain in the lower adjacent band indefinitely. It works well with wireless medical telemetry, as evidenced by the Joint Statement of Position. And by allocating 1427-1432 MHz to utility telemetry, the Commission can

accommodate the substantial base of AMR users that are already in the band and harmonize U.S. and Canadian allocations.

By way of contrast, allocating 1427-1432 MHz frequencies to other proposed uses raises interference and other issues. Because of interference concerns, the federal government, the radio astronomy community, and wireless medical telemetry interests all have opposed an allocation in the band for Little LEO feeder links, which also would interfere with utility telemetry. Similarly, the constraints imposed on the 1427-1432 MHz band by incumbent federal government users and neighboring radio astronomy and wireless medical telemetry operations would substantially limit deployment of private land mobile radio services in the band. For all of these reasons, the Commission should adopt Option 2 with the modification proposed in these Comments.

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COMMENTS OF ITRON, INC.

Itron, Inc. ("Itron"), by its attorneys, hereby comments on the Notice of Proposed Rulemaking ("NPRM"), released November 20, 2000, in the above-referenced proceeding. For the reasons set forth below, Itron urges the Commission to adopt a modified version of Option 2, allocating the 1427-1432 MHz band on a co-primary basis to utility telemetry operations ("Utility Telemetry"), including automatic meter reading ("AMR"), and Wireless Medical Telemetry Services ("WMTS"). It is proposed that Utility Telemetry and WMTS share the band in accordance with the attached Joint Statement of Position, to which representatives of Utility Telemetry and WMTS have agreed.

INTRODUCTION AND BACKGROUND

The Commission seeks comment on a number of proposals regarding the reallocation of spectrum bands, including the 1.4 GHz band, that have been transferred from government to non-government use. With respect to the 1.4 GHz band, this proceeding is the culmination of a series of FCC and federal government actions over the past ten years to foster commercial development of the spectrum from 1427-1432 MHz.

Although the federal government has been the principal user of this band, there is a longstanding FCC allocation permitting utility telemetry stations to operate on 1427-1432 MHz frequencies on a secondary basis to federal government stations. Itron

manufactures and, with its utility customers, operates 1427-1432 MHz Utility Telemetry systems.

Use of the 1427-1432 MHz band by utilities sprang from an initiative begun by Congress and spearheaded by the Commission, the Department of Energy (“DOE”), and the National Telecommunications and Information Administration (“NTIA”). Congress sought the creation of “new and innovative communications equipment and services to further the national goals of conserving energy and protecting public health and safety by monitoring utility services outages during earthquakes, hurricanes, typhoons, tornadoes, volcanoes, and other natural disasters.”¹ The goal was to demonstrate:

(i) “the feasibility of using communications technologies to read meters from remote locations; (ii) the feasibility of managing electric power and natural gas consumption; and (iii) “the public safety implications of monitoring utility services outages during earthquakes, hurricanes, typhoons, tornadoes, volcanoes, and other natural disasters.”²

Congress’ objectives echoed the Commission’s own conclusion at an earlier stage that AMR systems “benefit consumers by reducing billing problems, increasing the accuracy of meter readings and, ultimately, lowering utility bills.”³

With Congress’ directive in mind, in 1993 the Commission, with the concurrence of the federal government, issued Itron a nationwide license to develop and test wireless AMR/Utility Telemetry systems in the 1427-1429 MHz band.⁴ Shortly thereafter, the Commission upgraded Itron’s license, giving it full operational authority⁵ and, by 1998, Itron’s license was expanded to cover the full 1427-1432 MHz band. After

¹ Telephone Disclosure and Dispute Resolution Act, Pub. L. No. 102-556, 106 Stat. 4181, § 401 (1992); see also Innovative Utility Communications Technology, NTIA Docket No. CE-NOI-93-001 (Jan. 19, 1993); “Proposal for Demonstrating the Potential of Innovative Communications Equipment and Services for Utility Applications,” United States Department of Energy (Sept. 2, 1993).

² Id.

³ Amendment of Sections 22.501(g)(2) and 94.65(a)(1) of the Rules and Regulations to Re-Channel the 900 MHz Multiple Address Frequencies, 3 FCC Rcd 1564 (1988).

⁴ File No. 9301081307.

⁵ File No. 9401115177.

Itron received its initial license and had begun to deploy its network, NTIA included the 1427-1432 MHz band as part of the spectrum to be transferred to the FCC pursuant to a Congressional directive.⁶

Since then, the Commission has received proposals, each of which is discussed in the NPRM, requesting allocation of frequencies in the 1.4 GHz band for various applications. Among others, NVNG MSS licensees (“Little LEOs”) have asked the Commission to allocate the band for feeder downlinks, and other parties have proposed various land mobile services for the band. The Land Mobile Communications Council filed a petition for rulemaking seeking allocation of various bands, including the 1427-1435 MHz band, to the Private Mobile Radio Service (“PMRS”) for use by industrial and public safety licensees.⁷ In addition, on February 29, 2000, Itron filed a petition for rulemaking requesting a primary allocation for Utility Telemetry.⁸ Finally, and as noted in the NPRM, the Commission in a separate order allocated a portion of the band (1429-1432 MHz) for WMTS (the “WMTS Order”).⁹

In light of the proposals pending at the FCC, and based on the WMTS Order, the Commission now has identified three possible allocation “Options” for the 1.4 GHz band, each of which, with varying degrees of responsiveness to the needs of Utility Telemetry, includes some spectrum designated for Utility Telemetry operations. Under Option 1, Utility Telemetry would be elevated to co-primary status with WMTS in the 1429-1432 MHz portion of the band. Under Option 2, the 1427-1429 MHz band would be allocated on a primary basis exclusively for Utility Telemetry, and 1429-1432 MHz would be shared on a co-primary basis by Utility Telemetry and WMTS. Under Option

⁶ See Omnibus Budget Reconciliation Act of 1993 (“OBRA-93”), Pub. L. No. 103-66, 107 Stat. 312 (1993); Balanced Budget Act of 1997, Pub. L. No. 105-33, 111 Stat. 251 (1997). NTIA identified spectrum to be reallocated in two reports, the Special Reallocation Final Report, NTIA Special Pub. 95-23 (1995) and the Spectrum Reallocation Report, NTIA Special Pub. 98-26 (1998). The 1427-1432 MHz band was proposed for reallocation in the 1995 NTIA Report pursuant to OBRA-93.

⁷ Petition for Rulemaking, RM-9267 (filed June 10, 1999).

⁸ See RM-9854.

⁹ Amendment of Parts 2 and 95 of the Commission’s Rules to Create a Wireless Medical Telemetry Service, 15 FCC Rcd 11206 (rel. June 12, 2000) (WMTS Order”).

3, WMTS would be shifted to 1427-1430 MHz and Utility Telemetry would be upgraded to co-primary with WMTS in that portion of the band.

Of the three options discussed in the NPRM, only Option 2 would provide adequate spectrum for Utility Telemetry and WMTS while protecting existing federal government and radio astronomy users of the 1.4 GHz band and adjacent frequencies. Utility Telemetry and WMTS will function more efficiently, however, if they are permitted to share the entire 5 MHz of spectrum between 1427-1432 MHz on a co-primary basis, in accordance with sharing criteria that they have developed. With that modification, Itron supports adoption of Option 2.

DISCUSSION

I. Utility Telemetry Is In The Public Interest.

AMR technologies improve dramatically the accuracy and reliability of meter reading. Using AMR systems, utilities are able to increase the number of meters that can be read in an eight-hour shift by a factor of twenty or more compared with conventional handheld systems that require the reader to view the meter.¹⁰ In addition, AMR systems make it easier for utilities to detect meter tampering, which reduces the costs and inconvenience that can result — both for consumers and utilities — from energy theft and erroneous readings, and enable utilities to monitor and change the power consumption of their equipment from remote locations using wireless sensor devices.

Two-way systems, such as Itron's 1427-1432 MHz systems, provide even greater benefits by establishing a direct link between a utility and its customers' utility meters. The utility can use this link to offer its customers a variety of strategies to reduce peak demand and shift usage to off-peak hours, as well as encourage conservation by providing customers with detailed, real-time price, consumption and outage

¹⁰ See Yochi J. Dreazen and Jacob M. Schlesinger, *Job Stretching: Raleigh, N.C., Shows A Tight Labor Market Can Spur Productivity — Reading Meters by Computer*, WALL ST. J., Feb. 7, 2000, at A1.

information . Together, these benefits reduce energy costs, improve customer service, promote responsible environmental management, and make it possible for utilities to defer or avoid altogether the need to construct new generating capacity.

The efficiencies generated by AMR systems have become increasingly important as the utility industry is deregulated and access to competing utility service providers spreads. Under deregulation, the functions performed to date by a single entity are being disaggregated to foster competition in the generation, transmission, wholesaling, and distribution to end users of energy. Reconciling the multiple, overlapping transactions involving these service providers requires consumption information on a daily basis, and in some cases more frequently. The ongoing power shortages in California underscore the need for utilities and other energy suppliers to have accurate and timely information concerning the requirements of their customers, and to have the capability to monitor and control power distribution.

AMR on a real time basis is critical in this environment. Real time metering coupled with information about the changing price of power would permit customers to shift their power use to the cheaper off-peak periods. This will lower demand when capacity is strained, reduce the need for new power plants, and help protect the environment.

In addition to enhancing the efficiency of daily utility operations through AMR, Utility Telemetry contributes to public safety. For example, it improves utility system functionality and response during times of emergency, power outage, or when other circumstances exist that may pose a risk to life and public safety.¹¹ Utility Telemetry also helps to ensure the smooth and safe operation of railroads, and aid in protecting the environment by allowing remote monitoring of important pipeline functions.

The importance of Utility Telemetry was foreseen by policy makers years ago. As noted above, Congress specifically directed the federal government in 1992 to foster

¹¹ WMTS Order, 15 FCC Rcd at 11211-12.

the development of new and innovative communications equipment and services to advance the twin goals of conserving energy and protecting public health and safety. Now that the 1427-1432 MHz band has been reallocated from the federal government to private commercial use, the Commission is in a position to carry through on Congress' directive by making the band a permanent home for Utility Telemetry operations.

II. Option 2, With Minor Modification, Is The Preferred Alternative.

As noted above, dedicated wireless applications are an important component of efficient utility operation, utility competition, and responsible environmental management. The Commission, therefore, should ensure that adequate spectrum is made available for Utility Telemetry. Only Option 2, of the three options described in the NPRM, would satisfy this objective.

A. The 1427-1432 MHz Band Is Well Suited For Utility Telemetry.

Option 2 contemplates making Utility Telemetry primary or co-primary throughout five MHz of spectrum in the 1427-1432 MHz band. This band, as Itron demonstrated in its petition for rulemaking, is well suited to the task. The characteristics of the band make it a relatively inhospitable environment for most services, but an ideal environment for Utility Telemetry.

The 1427-1432 MHz band currently is used by the U.S. military for tactical radio communications, and it will continue to be used for military operations until 2004.¹² In addition, the band is adjacent to the 1400-1427 MHz band, which is used for radio astronomy operations that will need to be protected indefinitely.¹³ The Commission previously found that "continued Federal operation ... will likely significantly impair the ability of the private sector to implement services in the band until the cessation of

¹² FCC Plan for Reallocated Spectrum, 11 FCC Rcd 17841 (1996) ¶ 28.

¹³ Footnote US311 of the United States Table of Frequency Allocations, and International Radio Regulation 718 (new regulation S5.149) of the ITU's Radio Regulations urge administrations to make every effort to avoid frequency assignments that could cause interference to radio astronomy operations.

Federal operations.”¹⁴ Since the Commission drew that conclusion, it allocated a portion of the band to the vitally important WMTS, further complicating the efforts of those seeking to use 1427-1432 MHz for fixed or mobile communications or satellite operations.

Utility Telemetry systems, which operate at low power levels, have co-existed safely in the 1427-1432 MHz band with federal government users and radio astronomy operations. Itron has been licensed to operate in all or a portion of the band for over seven years; during that period, its systems have proven their ability to operate harmoniously with both of these protected users. As discussed below, Itron and the American Hospital Association Task Force on Medical Telemetry have developed a band plan that will enable them to share the band successfully for the benefit of utilities and health care providers on a nationwide basis.

Itron and its customers have invested more than \$250 million in the development and use of AMR systems for 1427-1432 MHz frequencies that do the job and are compatible with federal government and radio astronomy operations. Itron has deployed more than 20,000 network nodes nationwide in the band, and shipped more than 16 million AMR units to over 650 electric, gas, and water utilities. More than \$650 million has been invested in making meters capable of being read with handheld or mobile devices and easily upgraded to being read by a fixed AMR.

Other suitors for 1427-1432 MHz spectrum cannot co-exist with federal government and radio astronomy operations or with WMTS as well as Utility Telemetry. For example, the Commission has asked in the NPRM whether 1429-1432 MHz could be allocated to Little LEO feeder downlinks on a shared, co-primary basis. If the Commission were to allocate 1427-1432 MHz in the manner proposed herein, then the Little LEOs, in addition to sharing with federal government and radio astronomy users, would have to share with Utility Telemetry and WMTS in order to operate feeder

¹⁴ FCC Plan for Reallocated Spectrum, 11 FCC Rcd 17841, FCC 96-125, ¶ 28 (1996).

downlinks at 1429-1432 MHz. The ability of Little LEO systems to satisfy these sharing requirements fully is impossible.¹⁵

NTIA has stated unequivocally that “reallocation of the 1427-1432 MHz band for airborne and space-to-earth applications must be avoided.”¹⁶ The radio astronomy community consistently has opposed using 1427-1432 MHz for feeder downlinks. The American Hospital Association concluded in its comments in the WMTS rulemaking that the “operating parameters for Little LEOs will make it very difficult, perhaps impossible, for low power WMTS devices to share spectrum with Little LEO operators.”¹⁷ Low power Utility Telemetry devices face similar constraints, exacerbated by the fact that many Utility Telemetry installations are outdoors, eliminating the possibility that buildings will attenuate the feeder downlink signal.¹⁸

The constraints imposed on the 1427-1432 MHz band by the incumbent federal government users and the neighboring radio astronomy and WMTS operations also will substantially limit deployment of private land mobile radio services in the

¹⁵ The Canadian government, which also has allocated 1.4 GHz frequencies for Utility Telemetry (see Section II.C, below), expressed concern at the CITELE meeting this month that Little LEO feeder downlinks could interfere with Utility Telemetry systems and radioastronomy. See “Canadian Preliminary Views for WRC-2003, Chapter 2, Mobile, mobile-satellite, and space science services,” OEA/Ser.L/XVII.4.3, PCC.III/doc. CAN-01-C2, p.6.

¹⁶ NPRM ¶ 28.

¹⁷ Amendment of Parts 2 and 95 of the Commission’s Rules to Create a Wireless Medical Telemetry Service, ET Docket No. 99-255, NPRM, Comments of AHA at iii, 9; see also WMTS Order, 15 FCC Rcd 11214 (medical telemetry at 1429-1432 MHz “may limit possible use of the this band” by Little LEOs).

¹⁸ Itron notes that one Little LEO company, Final Analysis, has presented it with a revised technical proposal for operating feeder downlinks in the 1427-1432 MHz band. Itron is in the process of evaluating this proposal. To the extent that the new proposal changes Itron’s analysis, Itron will address this matter in a subsequent filing.

band.¹⁹ As the Land Mobile Communications Council (“LMCC”) acknowledged in its petition for rulemaking, many of the federal government sites protected through 2004 are in key urban areas, and the need to operate on a non-interference basis with these sites “would substantially limit any PMRS deployment in these areas.”²⁰ The Commission has concluded that “continued Government operations limit or may even eliminate coverage of most major metropolitan areas until the year 2004.”²¹

Option 2 would give LMCC a substantial portion of what it is seeking while at the same time accommodating the needs of Utility Telemetry and WMTS interests. This option would add to the large pool of frequencies that already is dedicated to PMRS services. Under Option 2, 1392-1395 MHz would be paired with 1432-1435 MHz to establish a new allocation for PMRS that, as recommended by LMCC, would be available to band managers. In addition, under Option 2 1390-1392 MHz would be made available for fixed and mobile services on an unpaired basis.

Without doubt, 1427-1432 MHz is the best home for Utility Telemetry. It is compatible with other users and there is a substantial installed base of equipment that already operates in the band. Under the modified version of Option 2 proposed in these Comments, the Commission can provide adequate spectrum for Utility Telemetry; serve the needs of WMTS; protect the operations of the federal government and radio

¹⁹ Land mobile stations generally require higher power levels than their Utility Telemetry counterparts, making them poorer candidates for sharing. One of the forces that drove the Commission to establish a primary allocation for WMTS in the 1427-1432 MHz band was the interference issues that terrestrial land mobile services were causing for low power wireless medical telemetry operations in other bands. See Amendment of Parts 2 and 95 of the Commission’s Rules to Create a Wireless Medical Telemetry Service, 14 FCC Rcd 16719, 16720-22 (1999); WMTS Order, 15 FCC Rcd at 11207.

²⁰ LMCC Petition for Rulemaking at ¶ 74; see also Memorandum from MILDEP IRAC Members to Chairman, IRAC, dated May 22, 1998 at 2 (attached to NTIA Comments) (stating that the Army, Navy, and Air Force “strongly oppose” an allocation of the 1427-1432 MHz band for general PMRS operations); NTIA Comments at 3 (due to continued Federal government use of the band, NTIA could support PMRS use of the band only under “appropriate” circumstances); Letter from David Struba, NASA Representative to IRAC, and Tomas E. Gergely, NSF Representative to IRAC, to Edwin E. Dinlke, Executive Secretary, IRAC, dated May 19, 1998, at 1, 3 (attached to NTIA Comments) (opposing the reallocation of the 1427-1432 MHz band for general PMRS use unless it can be “clearly demonstrated” that sensitive radio astronomy operations can be fully protected).

²¹ FCC Plan for Reallocated Spectrum, 11 FCC Rcd at ¶ 28.

astronomy users; and expand the options of those seeking access to spectrum for PMRS purposes.

B. Utility Telemetry Should Have Access To The Entire 1427-1432 Band On A Shared, Co-Primary Basis With WMTS.

As the Commission is aware, members of the AHA Task Force on Medical Telemetry (“AHA”), acting in the interests of the users and manufacturers of medical telemetry devices and systems, and Itron, acting in the interests of the users and manufacturers of Utility Telemetry devices and systems, have been discussing how WMTS and Utility Telemetry best can share the 1427-1432 MHz band. In the WMTS allocation proceeding, Itron and AHA informed the Commission that they had been meeting to develop a framework for sharing, and were confident that their efforts would be successful.²² The parties have continued their efforts since that time, and have arrived at the attached Joint Statement of Position setting forth their common views as to a sharing plan.

The sharing plan is similar to what the Commission has proposed in Option 2, with one modification. Rather than allocating 1427-1429 MHz exclusively to Utility Telemetry and making Utility Telemetry and WMTS co-primary in 1429-1432 MHz, as Option 2 would do, the sharing plan would make Utility Telemetry and WMTS co-primary, *vis-à-vis* other uses, throughout the 1427-1432 MHz band. This modification will provide additional flexibility that will enable utility and medical users to use the band more efficiently and to accommodate existing AMR operations.

Although Utility Telemetry and WMTS would be co-primary *vis-à-vis* other uses, the Joint Statement of Position establishes relative priorities making Utility Telemetry and WMTS primary or secondary *vis-à-vis* one another. Subject to certain exceptions, Utility Telemetry is given primary status in 1429.5-1432 MHz, and WMTS is given primary status in 1427-1429.5 MHz. The Joint Statement of Position also specifies maximum transmitter output powers and out-of-band emissions limits.

It is necessary to segment the band because, as a general matter, Utility Telemetry stations cannot operate on the same frequency in proximity to one another without causing interference. The band plan provides, however, for Utility Telemetry and WMTS to operate on a secondary basis on the other service's primary frequency, if there is a sufficient distance between the two that the field strength at the site that could be interfered with is kept below 150 uV/m.

The Joint Statement of Position protects AMR systems that already operate on 1427-1429 MHz. As indicated above, WMTS generally is given primary status in that part of the band. In certain designated markets with operating AMR systems, however, WMTS will be primary in 1429-1431.5 MHz and Utility Telemetry will be primary in 1427-1429/1431.5-1432 MHz. In other such markets, Utility Telemetry may continue to use a portion of 1427-1429 MHz on a primary basis until February 1, 2006, after which it will be secondary on those frequencies.

The Joint Statement of Position provides that WMTS users, who do not apply for individual licenses, would continue to register with the frequency coordination database maintained by the American Society of Health Care Engineers ("ASCHE"). The Commission already has adopted this procedure in connection with the WMTS allocation proceeding.²³ Utility Telemetry users would have to coordinate their usage with a Utility Telemetry frequency coordinator before they could receive a frequency assignment. Secondary uses would have to be cleared with ASHCE or the Utility Telemetry frequency coordinator, as appropriate. To facilitate these arrangements, the parties urge that the Commission require ASHCE and the Utility Telemetry coordinator to share data base information and cooperate in carrying out their duties.

The Joint Statement of Position can be implemented only if the Commission adopts Option 2. Options 1 and 3 contemplate that Utility Telemetry and WMTS would share only 3 MHz of spectrum — at 1427-1430 MHz or 1429-1432 MHz. If either service

²² See NPRM ¶ 25.

²³ See Order, DA 01-470 (Feb. 23, 2001).

were to use 2 MHz in a market — and Itron already operates AMR systems in a number of markets that use 2 MHz – then only a single MHz would remain in the market for the other user. By even the most conservative account, 1 MHz is inadequate for Utility Telemetry or WMTS.

In short, the many benefits provided by WMTS and Utility Telemetry would be lost if the FCC were to adopt Option 1 or Option 3. Option 2, by contrast, with a slight modification, preserves adequate spectrum for WMTS and Utility Telemetry based on a sharing arrangement that would maximize flexibility and preserve the ability of incumbent AMR systems to continue operating. Option 2 should be modified, therefore, to reflect a co-primary allocation for WMTS and Utility Telemetry across the entire 5 MHz of spectrum between 1427-1432 MHz.

C. Option 2 Would Harmonize U.S. And Canadian Allocations.

The Canadian authorities have allocated the 1427-1430 MHz and 1493.5-1496.5 MHz bands for narrowband multipoint communications systems “to support fixed telemetry applications for automatic meter reading.”²⁴ By allocating the 1427-1432 MHz band in accordance with Option 2 as modified above, the Commission would harmonize the U.S. and Canadian allocation plans. Although not identical, the frequencies in the two plans are sufficiently similar that equipment manufacturers will be able to develop equipment for both markets and spread their fixed costs over a wider base, thereby lowering prices for end users and encouraging innovation in the industry.

D. Auctions For Utility Telemetry In The 1427-1432 MHz Band Are Unnecessary.

Although the Commission is soliciting comments on ways that spectrum for some of the frequencies at issue in the NPRM might be auctioned,²⁵ it has not proposed

²⁴ Industry Canada, Amendments to the Microwave Spectrum Utilization Policies in the 1-3 GHz, SP 1-3 GHz (Oct. 1999) at 1.

²⁵ See, e.g., NPRM ¶ 37.

to use auctions for Utility Telemetry operations in the 1427-1432 MHz band. Itron supports this approach.

Based on its years of experience with AMR systems, Itron is confident that Option 2, with the modifications proposed herein, will provide adequate spectrum for Utility Telemetry users on a first come, first served basis. This plan eliminates the need for auctions or other selection procedures that would consume precious Commission resources.

Employing auctions, moreover, would undercut the plan that Utility Telemetry and WMTS representatives have crafted for sharing the 1427-1432 MHz band. The plan takes into account the particularized needs of the two services in different markets, including the need to make adjustments based on areas in which AMR systems already are operating on frequencies that deviate from the general Utility Telemetry/WMTS band plan. As a result of these adjustments, the 1427-1432 MHz frequencies that are earmarked in the first instance for Utility Telemetry or, alternatively, for WMTS vary from market to market and deviate from area to area within particular markets. Auctions are incompatible with this band plan.

Finally, auctions would be inconsistent with the auction exemption that Congress has mandated for public safety services. As the Commission recently recognized, Congress intended that utility communications benefit from this exemption, because they “provide essential services to the public at large” and “need reliable internal communications in order to prevent or respond to disasters or crises affecting their service to the public.”²⁶ Accordingly, the Commission should refrain from using auctions for Utility Telemetry licensing.

²⁶ Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, FCC 00-403 (Nov. 20, 2000), ¶ 64.

CONCLUSION

In view of the foregoing, the Commission should adopt Option 2 with the modifications proposed herein.

Respectfully submitted,

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March 8, 2001

**JOINT STATEMENT OF POSITION BY THE
AMERICAN HOSPITAL ASSOCIATION
TASK FORCE ON MEDICAL TELEMETRY AND ITRON, INC.**

- I. This Joint Statement of Position expresses the intent of the undersigned parties to adopt a sharing plan for the assignment of licenses in the 1427-1432 MHz band, to present the plan to the Federal Communications Commission (“FCC”) , to propose the adoption of this band sharing plan and its codification into regulations by the FCC in ET Docket No. 00-221, and to take additional actions in furtherance of such plan.
- II. The parties to this Joint Statement of position are the American Hospital Association Task Force on Medical Telemetry (“AHA Task Force”) acting in the interests of users and manufacturers of medical telemetry devices and systems and Itron, Inc. (“Itron”) acting in the interests of users and manufacturers of utility telemetering devices and networks in the electric, gas, and water utility industries.
- III. Itron and several electric and gas utilities presently hold licenses to operate on a secondary basis in the 1427-1432 MHz band to provide utility telemetry, including automated meter reading (“AMR”). The FCC has allocated the 1429-1432 MHz band on a primary basis to the Wireless Medical Telemetry Service (“WMTS”).
- IV. The FCC has issued a Notice of Proposed Rulemaking in ET Docket No. 00-221 (the “NPRM”) seeking comment on alternative allocation proposals for the 1427-1432 MHz band. The parties have determined that it serves the parties whose interests they represent for the FCC to allocate the 1427-1432 MHz band exclusively for “Utility Telemetry”, being AMR and other utility industry telemetry use on the one hand, and for WMTS use, on the other, with priority of use and technical characteristics set forth below.
Therefore:
 - A. The parties agree that each will propose in its filings regarding the NPRM, and cooperate to support during the course of the proceeding in Docket 00-221, that the 1427-1432 MHz band will be allocated to WMTS and Utility Telemetry on a co-primary basis *vis-à-vis* other uses. The parties further will propose that the FCC codify into the FCC rules the Frequency Management Plan, setting forth the primary and secondary status of WMTS and Utility Telemetry *vis-à-vis* one another throughout the United States, and the technical characteristics that will govern such use, all as set forth below.

B. Frequency Management Plan:

1. Except as set out in subsection B.3. below, licensees for Utility Telemetry will have primary status in 1429.5-1432 MHz (“Utility Band”). Licensees for WMTS may operate in this band only on a secondary, non-interference basis to Utility Telemetry.
2. Except as set out in subsection B.3. below, licensees for WMTS will have primary status in 1427-1429.5 MHz (“WMTS Band”). Licensees for Utility Telemetry may operate in this band only on a secondary, non-interference basis to WMTS.
3. Notwithstanding the frequency designations set out above, in the following geographic areas (“Utility Defined Areas”), in each of which Utility Telemetry have systems operating on or before February 1, 2001, the Utility Band will be the bands 1427-1429 MHz and 1431.5-1432 MHz and the WMTS band will be the band 1429-1431.5 MHz:
 - a. Areas in which Utility Telemetry systems will continue to use the 1427-1429 band indefinitely:
 - i. Pittsburgh, Pennsylvania market (Westmoreland, Washington, Beaver, Allegheny, and Butler counties)
 - ii. Springfield, Virginia market (Montgomery, Prince William, Fairfax, Prince George’s, and Charles counties, Alexandria City, District of Columbia)
 - iii. Richmond, Virginia market (Goochland, Powhatan, Hanover, and Henrico counties, Richmond City)
 - iv. Norfolk, Virginia market (Hampton City, Virginia Beach City, Chesapeake City, Portsmouth City, and Suffolk City)
 - v. Austin and Georgetown, Texas market (Williamson and Travis counties)
 - vi. Battle Creek, Michigan market (Calhoun County)
 - vii. Detroit, Michigan market (Oakland county)
 - viii. Spokane, Washington market (Spokane county)

b. Areas in which Utility Telemetry Systems will continue to use the 1427-1429 band on a primary basis until February 1, 2006. Such systems may not expand outside of the designated areas or add channels or frequencies. During this period, licensees for WMTS may operate in this band on a secondary, non-interference basis to such Utility Telemetry Systems, subject to the provisions described in subsection B.4 below. After February 1, 2006, such Utility Telemetry Systems shall be treated as secondary users in the WMTS Band, subject to the provisions described in subsection B.4 below, and WMTS licensees shall be treated as primary:¹

i. Baltimore, MD.

Base Station A located at 39.308731N, -76.564498W, 139' above the ground, with 1 watt EIRP; service area #1 is a one mile radius centered around 39.2934N -76.5756W; service area #2 is a one mile radius centered around 39.3268N -76.5497W.

Base Station B located at 39.336944N -76.733333W, 284' above the ground, with 1 watt EIRP; service area is a one a one mile radius centered around 39.2969N -76.7391W.

ii. Santa Ana, CA.

Base Station located at 33.706669N - 117.789068W, 125' above the ground, with 1 watt EIRP; service area is a one mile radius centered around 33.69187N - 117.78234W.

iii. Long Island, N.Y.

Base Station located at 40.608778N - 73.762433W, 150' above the ground with 1 watt EIRP, service area is a one mile radius centered around 40.60249N - 73.76198W.

4. Co-channel use of the Utility Band by WMTS Licensees and co-channel use of the WMTS Band by Utility Telemetry Licensees will be permitted on a secondary, non-interference basis to any existing or future primary licensee of that band, as follows:

a. The co-channel users must be located at a sufficient distance apart to maintain a field strength of $< 150\mu\text{V}/\text{m}$, H and V,

¹ Within 90 days of the date of execution of this joint statement of position, Itron will provide a list of the exact frequencies used in these Utility Telemetry Systems.

measured over any 1 MHz with an averaging detector as measured at the interfered site.

- b. In the event of any dispute between the primary and secondary users, such dispute shall be resolved by reference to an industry-standard propagation study conducted at the expense of the secondary user and approved by the frequency coordinator/manager specified in Section III.C. below.

5. The maximum transmitter output power for Utility Telemetry shall be no greater than 1 watt EIRP in the 1429.5-1430.5 MHz band, no greater than 10 watts EIRP in the 1430.5-1431.5 MHz band, and no greater than 100 watts EIRP in the 1431.5-1432 MHz band, *provided, however*, that in the Utility Defined Areas set out above, the maximum transmitter output power for Utility Telemetry shall be no greater than 100 watts EIRP in the 1427-1428 MHz band, 10 watts in the 1428- 1428.5 band, 1 watt in the 1428.5-1429 MHz band, and 10 watts in the 1431.5-1432 MHz band. The maximum transmitter output power (expressed in field strength) for WMTS shall be not greater than those limits specified in Part 95 of the FCC rules 740mV/m at 3 meters over 1 MHz (160mW EIRP). The maximum level of “out-of-band” emissions between Utility Telemetry use and WMTS use and between WMTS use and Utility Telemetry use shall be no greater than 150uV/m, H and V, measured over any 1 MHz with an averaging detector as measured at the interference site.

C .In accordance with the Frequency Management Plan set forth in Section B above, specific assignments in the Utility Band will be subject to prior frequency coordination by the designated Utility Telemetry frequency coordinator. Registration of licensed WMTS users in the WMTS Band into the frequency coordination database for the WMTS will be implemented through the American Society of Health Care Engineers (“ASHCE”). Secondary uses of the bands must be coordinated/registered with the appropriate frequency coordinator/manager prior to installation and operation. The parties shall urge the Commission to require ASHCE and the utility coordinator to provide access to each others data bases and to encourage communication and cooperation between them in carrying out their duties.

D. The parties agree to cooperate in proposing this band plan to the FCC and to take such additional actions as may be reasonably necessary in connection with seeking FCC adoption and codification of the band plan and frequency management plan described above, and to take such other action as shall not

prejudice either party's ability to retain the primary rights to at least 2.5 MHz of spectrum in the 1427-1432 MHz band. Neither party will seek to implement other sharing of these channels with users and for uses not contemplated in this joint statement of position, without discussing it with the other party and giving such party the opportunity to participate fully in such discussions. . The parties agree to negotiate in good faith concerning any additional terms that may be required to implement the understandings in this joint statement of position.

E. This joint statement of position may be executed in multiple counterparts. Each counterpart shall be deemed an original, and collectively the counterparts shall constitute a single instrument

IN WITNESS WHEREOF, the parties have executed this joint statement of position as of this 8th day of March, 2001.

Itron, Inc.

American Hospital Association
Task Force on Medical Telemetry

By: /s/ Russ Fairbanks
Russ Fairbanks
Vice President & General Counsel

By: /s/ Mary Beth Savary Taylor
Mary Beth Savary Taylor
Director
Executive Branch Relations