

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)
Amendment of Part 2 and Part 90 of the) **RM-9854**
Commission’s Rules to Allocate the)
1427-1432 MHz Band for Automatic)
Meter Reading and Utility Telemetry Use)

COMMENTS OF UTC

Pursuant to Section 1.405 of the Federal Communications Commission's ("Commission") Rules, United Telecom Council ("UTC"), hereby submits its comments in support of Itron’s Petition for Rulemaking appearing in the Commission’s *Public Notice, Report No. 2405*, released April 20, 2000.¹ Utilities rely on automatic meter reading ("AMR") systems for efficient operation of their core businesses and have made significant investments in equipment for systems that utilize the 1427-1432 MHz band, which is uniquely suited for AMR and for which no reasonable substitute spectrum is available. This investment was encouraged by the Commission, which recognized that AMR systems, "benefit consumers by reducing billing problems, increasing the accuracy of meter readings and, ultimately, lowering utility bills."² Consistent with its longstanding support

¹ 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, Petition for Rulemaking of Itron, Inc. in RM-9854 (Feb. 29, 2000)(hereinafter "Itron’s Petition").

² Amendment of Section 22.501(g)(2) and 94.65(a)(1) of the Rules and Regulations to Re-Channel the 900 MHz Multiple Address Frequencies, *Report and Order*, 3 FCC Rcd 1564, 1568 (1988), *accord*, Amendments of §§ 22.501(g)(2) and 94.65(a)(1) of the Rules and Regulations to Re-Channel the 900 MHz Multiple Address Frequencies; Amendment of § 94.65(a)(1) of the Rules to Revise Footnote 3 in the Frequency Table to Make the Frequencies Available for use by any Part 94 Eligible; Amendment of Part 2 and §§ 94.63(d)(5) and 94.65(a)(1) Footnote 3 of the Rules to Permit Operation of Mobile Remote Meter Reading Systems on a Primary Basis on the Exclusive Power Radio Service Frequencies in the 952.3625 - 952.8375 MHz Band; Amendment of Part 94 of the Rules to Permit Intrasystem Communications Among

for AMR systems, the Commission should allocate the 1427-1432 MHz band on a primary basis for AMR and utility telemetry service.

I. Background

UTC is a trade association whose membership is composed of the nation's water, gas and electric utilities and natural gas pipelines. Many of UTC's members are utility companies that have deployed AMR systems in support of their core businesses. Some of these AMR systems rely on the 1427-1432 MHz band to relay metering data to information collection points, which data is initially collected through interrogate/response techniques using both licensed MAS frequencies and unlicensed spread spectrum channels in the 902-928 MHz band. As such, UTC has been an ardent proponent for AMR services in a variety of Commission proceedings³ and is pleased to support Itron's Petition.

Itron's operational authority has expanded since 1993 from developmental authority to operate in the 1427-1429 band⁴ into full operational authority in the 1427-1432 MHz band, initially granted in 1998 and renewed for an additional five year period in 1999.⁵ This band is ideal for licensing by AMR and utility telemetry service,⁶ and no

Multiple Address System Master Stations, PR Docket No. 87-5, *Notice of Proposed Rulemaking*, 2 FCC Rcd 553, 559 (1987)(concurring that "the utility consumer ultimately may profit by lower utility bills resulting from the cost reductions associated with remote meter reading.")

³ See e.g. Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, PR Docket 93-61, Comments of UTC (June 25, 1993)(advocating against rules for location monitoring services ("LMS") that would preclude the use of the 902-928 MHz band for AMR); and see Amendment of the Commission's Rules Regarding Multiple Address Systems, WT Docket No. 97-81, Comments of UTC at 5-6 (May 1, 1997)(noting current estimates and predictions for AMR deployment that use MAS spectrum).

⁴ File No. 9301081307.

⁵ See Itron's Petition at 3.

⁶ Itron's Petition at 8.

reasonable substitute spectrum exists.⁷ UTC shares Itron's concerns with the Commission's proposals to allocate portions of this spectrum for medical telemetry and a new Land Mobile Communications Service. The Commission should not compromise the critical communications of utility companies by diverting desperately needed spectrum to allocations that, to the extent they are necessary, can be accommodated with AMR services by the adoption of minimum safeguards and informal industry cooperative solutions.⁸ Instead, the Commission should allocate the 1427-1432 MHz band for AMR services to be licensed on a primary basis.

II. Utilities Depend on the 1427-1432 MHz Band for AMR and Telemetry Services.

Utilities are increasingly dependent on automated functions supported by communications spectrum, AMR being a prime example. In 1999-2000 alone, approximately 14.2 million units were deployed or planned to be deployed in the Americas, Europe, India, the Middle East and Australasia.⁹ Generally, these meters operate in the United States on the 902-928 MHz band, but owing to the Part 15 technical rules, metering information can only be transmitted a short distance. As such, many systems require technicians to poll the meters from close proximity to the customer premises, dramatically increasing the labor costs involved.

Fixed AMR networks eliminate the additional costs associated with truck-roll by deploying two-way communications that poll the meters (typically on 900 MHz MAS

⁷ Itron's Petition at 9.

⁸ *See e.g.* Itron's Petition at 10-12.

⁹ "2000 AMRA Report Chronicles Record-Breaking Deployment Plans: Utilities to Install Nearly 15 Million AMR Units" at <http://www.amrahq.com/press/T&IJan00.htm> (visited May 22, 2000).

channels), collect the metering data (typically transmitted from the meter using low power spread spectrum in the 902-928 MHz band), and relay the data to a central collection point via the 1427-1432 MHz band.¹⁰ Therefore, the 1427-1432 MHz band serves a critical communications link for utilities, resulting in significant efficiencies and cost-savings that translate into lower bills for utility ratepayers. As such, removing AMR operations from the 1427-1432 MHz band or grandfathering existing operations would impose undue hardship on consumers, as well as utilities. Moreover, despite the large base of meters already configured for remote reading, these represent only a small percentage of the meters in the country.¹¹

III. Allocating the 1427-1432 MHz Band to AMR and Utility Telemetry Service is in the Public Interest.

The Commission has acknowledged that the deployment of AMR services is consistent with the public interest. As early as 1974, the Commission has facilitated the deployment of AMR systems,¹² culminating in a *Report and Order* adopting rules for the licensing of AMR systems on a primary basis on the 956 MHz unpaired channels.¹³ In recognition of “the important contribution to the public . . . [from] valuable services such

¹⁰ See Itron’s Petition at 10-11 n.26.

¹¹ According to a 1998 study by the Automatic Meter Reading Association (“AMRA”) about 16 million AMR units were installed in 2,095 North American AMR projects by January 1998. The figure represents a 6 percent saturation rate, an increase of 1.5 percent in 1998 alone, with a total of 20.8 million AMR units installed by January 1999. See Trends: A Year of Expansion for AMRA and the AMR Industry at <http://www.amrahq.com/98annualreport/98report2.htm#Trends> (visited May 22, 2000).

¹² In the Matter of the Development of Frequency Allocations and Regulations Applicable to the Use of Radio for the Remote Reading of Public Utility Meters, *Notice of Inquiry*, 46 F.C.C.2d 653 (1974).

¹³ Amendment of Section 22.501 (g)(2) and 94.65(a)(1) of the Rules and Regulations to Re-Channel the 900 MHz Multiple Address Frequencies, *Report and Order*, 3 FCC Rcd. at 1568.

as automated meter reading,” the Commission has adopted special conditions to permit deployment of unlicensed AMR systems in bands used for automatic vehicle monitoring systems.¹⁴ Grant of Itron’s Petition would be consistent with longstanding Commission policy that has promoted the deployment of AMR systems.

As Itron notes, it is unclear whether the public interest would be served by allocating portions of the 1427-1432 MHz band for medical telemetry or a new Land Mobile Communications Service, either one of which may be accommodated in alternative bands.¹⁵ Meanwhile, Itron’s customers, many of whom are utilities, “have invested more than \$150 million in their networks, and an additional \$650 million in making meters network enabled while reading them with handheld or mobile devices.”¹⁶ In 1988, the Commission sought to stimulate capital investment in AMR systems by licensing such systems on a primary basis.¹⁷ Having encouraged that investment, the Commission should not undermine it by reallocating the spectrum for services that may be better accommodated elsewhere.¹⁸

¹⁴ Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, *Report and Order*, 10 FCC Rcd 4695 (1995).

¹⁵ Itron’s Petition at 12-13. *See also* Amendment of Parts 2 and 95 of the Commission’s Rules to Create a Wireless Medical Telemetry Service, ET Docket No. 99-255, Comments and Reply Comments of Itron (Sept. 16, 1999 and Oct. 18, 1999).

¹⁶ Itron’s Petition at 9. For example, Dominion Resources, Inc. (formerly Virginia Power) reports that it has invested a significantly large amount of capital to install an extensive AMR network serving approximately 400,000 of its customers in Alexandria, Richmond, and Norfolk, Virginia, and could potentially lose its investment if the 1427-1432 MHz band was reallocated to another service. Likewise, other utilities are interested in deploying wide-area AMR systems that use this band, but are hesitant because of pending proposals to reallocate the spectrum.

¹⁷ Amendment of Section 22.501(g)(2) and 94.65(a)(1) of the Rules and Regulations to Re-Channel the 900 MHz Multiple Address Frequencies, *Report and Order*, 3 FCC Rcd. at 1568.

¹⁸ *See e.g.* Itron’s Petition at 11-14. *See also* An Allocation of Spectrum for the Private Land Mobile Radio Services, RM-9267, Comments of UTC at 9-10 (June 1, 1998)(recommending “that the Commission

Moreover, this band is uniquely well-suited for AMR and utility telemetry functions, and there is no other spectrum that would reasonably substitute for it. Itron has demonstrated over the course of five and one-half years that AMR can harmoniously coexist both with the military users that communicate on this spectrum and with radio astronomy applications that operate adjacent to it.¹⁹ If forced to vacate the 1427-1432 MHz band, utilities would suffer undue hardship, measured not only by stranded investments but also by the risk to “critical infrastructure industry systems on which the public depends.”²⁰ Nor would such hardship be justified, given Itron’s observation that AMR could coexist in the 1427-1432 MHz band with medical telemetry and Land Mobile Communications, if necessary.²¹ UTC therefore strongly urges the Commission to review the compatibility of utility AMR/telemetry and medical telemetry *before* making any final decisions that would preclude continued access to this band for AMR/telemetry operations.

UTC supports the grant of Itron’s Petition which will both protect reasonable investment-backed expectations in AMR and promote its further deployment, thereby “ultimately, lowering utility bills.”²² Of course, the public interest benefits attendant with basic AMR are equally applicable, if not more so, to wide-area fixed AMR systems.

consider restricting the use of this [1427-1432 MHz] band to meter reading and similar fixed telemetry applications,” but otherwise generally supporting LMCC’s Petition for additional spectrum for PLMR use).

¹⁹ Itron’s Petition at 8.

²⁰ *Id.* at 10.

²¹ *Id.* at 11-14.

²² Amendment of Section 22.501 (g)(2) and 94.65(a)(1) of the Rules and Regulations to Re-Channel the 900 MHz Multiple Address Frequencies, *Report and Order*, 3 FCC Rcd. at 1568.

Consumers enjoy privacy and convenience, because AMR does not require scheduled meter reads inside the home. It also helps customers monitor their energy consumption, and provides utilities with meter-tampering alerts, pinpoints power outages, and improves load projections. Fixed AMR networks also eliminate the need for numerous field visits by utility personnel, thereby reducing vehicular traffic and emissions, a goal of the Clean Air Act. Therefore, UTC submits that grant of the Petition is demonstrably in the public interest and is consistent with longstanding Commission policy supporting the critical infrastructure communications needs of the nation's utilities and pipeline companies.

WHEREFORE, THE PREMISES CONSIDERED, UTC requests the Federal Communications Commission to take action in accordance with the views expressed in these comments.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I Brett Kilbourne certify that a copy of the foregoing Comments of UTC were served on the parties below via first class mail, postage prepaid this 22nd day of May, 2000.

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