

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

In the Matter of)	
)	
Amendment of the Commission's)	WT Docket No. 06-49
Part 90 Rules in the 904-909.75 and)	
919.75-928 MHz Bands)	

REPLY COMMENTS OF THE UNITED TELECOM COUNCIL

The United Telecom Council ("UTC") hereby submits reply comments on the above-referenced Notice of Proposed Rulemaking ("NPR").¹ UTC was during the initial comment cycle, and remains, a member of the Part 15 Coalition, and continues to support that group's overall position. These Reply Comments are submitted to emphasize points specific to the needs of Critical infrastructure Industry ("CII") entities, who are significant users of Part 15 devices in the 902-928 MHz frequency band. UTC agrees with most participants in this matter that any rule changes to the Multilateration Location and Monitoring Service ("M-LMS") must be limited to measures that would not cause harmful interference to the Part 15 devices that comprise the heaviest use of extremely congested spectrum.

I. Any Rule Changes Should be Driven by Technical Considerations.

UTC agrees with the Part 15 Coalition's position that the full effects of M-LMS licensee Progeny LMS, LLC's ("Progeny") proposed new service are

¹ *In the Matter of Amendment of the Commission's Part 90 Rules in the 904-909.75 and 919.75-928 MHz Bands*, Notice of Proposed Rulemaking, WT Docket No. 06-49, FCC No. 06-24 (rel. March 7, 2006) ("NPR").

unknown.² Progeny's comments on the NPR promise "an Enhanced Position Location (EPL) service that will provide valuable enhancements for the public safety and homeland security markets."³ However, Progeny at the same time seeks complete elimination of rules that would limit its operations to any kind of location service. Moreover, its proposed flexibility goes beyond the type of service permitted, to technical changes that could have far-reaching harm.

UTC agrees with Progeny and other LMS licensees that strict designation of the M-LMS licenses for location services makes a successful business case unlikely given the proliferation of Global Positioning Satellite (GPS) applications and devices. M-LMS as a service is obsolete. However, UTC agrees with one commenter's observation that "[i]t has never been the Commission's responsibility to ensure the commercial success of its licensees."⁴ The FCC laudably outlines in the NPR the difficulties inherent in changing rules in such a complex environment. To adopt, as Progeny recommends, "service-neutral" rules without specific technical limitations would prove disastrous for the tens of millions of CII devices in this frequency band, among many other users. UTC submits that the degree of flexibility Progeny requests from the Commission ignores the reality of the band in which its purchased licenses must operate.

Many commenters in this proceeding refer to the "careful balance" the Commission crafted when creating the overlay M-LMS licenses some ten years

² Comments of the Part 15 Coalition, WT Docket No. 06-49, filed May 30, 2006, at 8-10.

³ Comments of Progeny LMS, LLC, WT Docket No. 06-49, filed May 30, 2006, at 2.

⁴ Comments of Cellnet Technology, Inc., WT Docket No. 06-49, filed May 30, 2006, at 3.

ago.⁵ Five layers of permitted use and hundreds of different types of devices are in place at 902-928 MHz, and the numbers of Part 15 devices reflected among commenting parties alone is staggering. The importance of these devices to daily life and industry is reflected in the Commission's unusual decision to create the "safe harbor" that helps to protect some unlicensed use; UTC agrees fully with the Commission's tentative conclusion not to eliminate that protection and with the many commenters that echo that position. The 902-928 MHz band must be one of the most efficiently used of any frequency band under the Commission's jurisdiction; the FCC, therefore, must take extreme care in seeking to change rules for the benefit of one class of licensee overtaken by technology developments.

While the actual effect of various power levels is unclear from comments,⁶ UTC believes strongly that the only type of operation in the M-LMS portions of the 902-928 MHz that could co-exist without harm to Part 15 devices is a low-power, non-voice, non-interconnected service with a short duty cycle.⁷ UTC agrees with those seeking flexibility that there is no need for the FCC to try to designate the purpose – such as the present terrestrial location service -- of such

⁵ *See, e.g.*, Cellnet comments at 2 ("a careful balancing of interests . . . relied upon by the other incumbents"); Comments of Motorola, Inc., WT Docket No. 06-49, filed May 30, 2006, at 4; Comments of Southern Company Services, Inc., WT Docket No. 06-49, filed May 30, 2006, at 1 ("Southern Comments").

⁶ *See, e.g.*, Comments of the Telecommunications Industry Association, WT Docket No. 06-49, filed May 30, 2006, at 7-8.

⁷ *Accord*, Southern Comments at 8; Comments of IEEE 802.18, WT Docket No. 06-49, filed May 30, 2006, at 2.

use. Competition among services is not the issue here; technical considerations are paramount.

II. Rule Changes Must Not Endanger Growing CII Use of the 902-928 MHz Band.

Several CII entities filed comments in this proceeding, outlining their varied uses of Part 15 devices in the 902-928 MHz band.⁸ While the use of the band for a growing number of automatic meter reading (AMR) systems is well-documented, some utility commenters also emphasize their reliance on this band for vitally important process control systems such as Supervisory Control and Data Acquisition (SCADA). Tampa Electric notes that its SCADA facilities “operate on these frequencies to provide real-time status communications between substations and status information and remote operation of key transmission and distribution switches. SCADA often is used to control and enhance reliability of essential electric power systems in remote and rural locations.”⁹

For a detailed picture of how utilities currently do, and will have to, use unlicensed frequencies, UTC especially calls the FCC’s attention to Southern’s comments. “Southern’s communications networks are an important component of Southern’s electric operations, as they are used to monitor the status of critical electric system components, analyze power consumption and power flows

⁸ *See, e.g.*, Southern Comments; Comments of Tampa Electric Company, WT Docket No. 06-49, received June 1, 2006 (“Tampa Comments”); Comments of SEMCO Energy, Inc., WT Docket No. 06-49, filed May 26, 2006; Comments of Bay State Gas Company, WT Docket No. 06-49, filed May 16, 2006.

⁹ Tampa Comments at 2.

across the system, and provide for remote switching to even the load across the system."¹⁰ Southern's comments provide excellent detail concerning how the utility currently uses the 902-928 MHz band for a growing metering network; distribution automation links where licensed networks are not possible; distribution efficiency equipment to aid in power conservation; and intelligent switching to minimize service disruptions.¹¹ Such systems will be a growing necessity for electric and other utilities as they seek to enhance reliability, conserve scarce energy and water resources, and serve their growing communities.

As Southern explains, increased national attention is focusing on achieving a next-generation, improved energy system:

For example, the Energy Policy Act of 2005 has recognized the importance of modernizing the Nation's electric grid to enhance reliability of service and to enable consumers to actively participate in managing their energy needs and expenses. Section 1252 of this Act requires utilities to implement time-of-use metering and communications no later than 18 months after the enactment of the law, which places the deadline in February 2007.¹²

States also are expected to require utilities to upgrade their infrastructure, provide more information to consumers to help them manage their energy consumption, and conserve energy resources, often with stricter regulations than those coming from Federal agencies. Much of the improvement will have to be made through the use of wireless technology such as the devices Southern already is implementing. While licensed spectrum is far preferable for many of

¹⁰ Southern Comments at 3.

¹¹ *Id.* at 4-6.

¹² *Id.* at 2 (citation eliminated).

these control networks, CII's lack of access to licensed bands is diverting the development of needed technology to unlicensed spectrum. This especially occurs in the 902-928 MHz band due to its lower position (and thus, greater propagation characteristics) in the RF spectrum continuum. Any attempt by commercial providers, such as Progeny, to meet these needs – and satisfy regulators' calls for improved electric reliability – would have to include guarantees of service equal to those utilities build into their private, internal networks. This is a guarantee no commercial provider has been able or willing to offer to date.

III. Conclusion

UTC continues to believe that some changes to the M-LMS rules are advisable to eliminate strict service restrictions that are no longer feasible. However, those advocating change have yet to demonstrate that the changes they seek to technical rules will not pose a significant threat of harmful interference to the hundreds of millions of Part 15 devices – some critical to the provision of basic services – operating in this band. UTC urges the Commission to proceed carefully before making any changes to its current balance of technical parameters governing use of the 902-928 MHz band.

WHEREFORE, THE PREMISES CONSIDERED, UTC respectfully requests that the Commission consider these Reply Comments and proceed in a manner consistent with the views expressed herein.

Respectfully submitted,

UNITED TELECOM COUNCIL

A handwritten signature in black ink, appearing to read "Jill M. Lyon", with a long horizontal flourish extending to the right.

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