

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

In the Matter of)	
Implementation of Sections 309(j))	WT Docket No. 99-87
and 337 of the Communications Act of)	
1934 as Amended)	
Promotion of Spectrum Efficient)	RM-9332
Technologies on Certain Part 90)	
Frequencies)	

**RESPONSE OF THE UTILITIES TELECOM COUNCIL
TO THE PETITION FOR RECONSIDERATION**

The Utilities Telecom Council (“UTC”) respectfully submits this Response to the Petition for Reconsideration of the City of New York¹ of the *Third Report and Order* in the above-referenced proceeding.² UTC supports New York’s call for a *Further Notice of Proposed Rulemaking* prior to any FCC decision to mandate migration to 6.25 kHz operation in the 150-512 MHz private land mobile radio (PLMR) bands. Given the many years since the introduction of “refarming” in these bands and the amount of subsequent change in the wireless environment, not to mention the enormous investment made by licensees, a review of the migration path is needed prior to further action that could harm those providing critical services to the public.

¹ *Petition for Reconsideration of the City of New York*, WT Docket No. 99-87, RM-9332, filed May 18, 2007 (Petition).

² Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, *Third Report and Order*, WT Docket No. 99-87, RM-9332, FCC 07-39, 72 Fed. Reg. 19387 (April 18, 2007).

UTC is the national representative on communications matters for the nation's electric, gas, water and steam utilities, and natural gas pipelines. UTC's members provide public safety and public service-related services throughout the United States and its possessions, as well as in Canada, Europe, Japan and elsewhere. UTC's members range in size from large combination electric-gas-water utilities that serve millions of customers, to smaller, rural electric cooperatives and water districts that serve only a few thousand customers each.

All utilities and pipelines depend on reliable and secure communications to assist them in carrying out their internal system operations and obligations to provide service to the public. Many of these systems use PLMR allocations in the 150-174 MHz, 450-470 MHz and 470-512 MHz frequency bands, among others. UTC's members rely on technology designed for PLMR implementation to provide a variety of critical services, including communications with emergency dispatch and restoration crews and providing safe and reliable energy and water to all consumers, governments, industries and businesses. Thus, UTC members are vitally interested in the future viability of, and technology offerings in, the 150-512 MHz bands.

I. The FCC Should Not Mandate Migration to 6.25 KHz Operation With Its Mandated 12.5 kHz Transition Underway.

In its petition, New York notes the extensive financial commitment it has made, and continues to make, in its transition to the next generation of PLMR technology, and its importance to the services it provides. "The lengthy planning and deployment times in public safety communications are due in part to the financing and approval processes. The overwhelming effort, however, is

committed to ensure that systems work in an emergency.”³ Substitute “utility” for “public safety” in the sentence above, and it remains a perfectly true statement. There are hundreds of utilities using the 150-512 MHz bands for land mobile voice and data systems that support the safety of field crews and make their work possible. Whether during the everyday hazards of working with live, high-power wires, or in emergencies from building fires to large-scale disasters, such systems must perform ultra-reliably. Moreover, these bands also are used for vital control systems that ensure the safe operation of electric grids, gas delivery systems and water networks.

Utilities are in the middle of planning and funding migrations to 12.5 kHz operation, processes that will cost a minimum of hundreds of millions of dollars. With some of these networks covering multiple states, this is not a quick or easy process: it takes years to plan, gain budget approvals and funding, and to deploy new equipment while simultaneously keeping existing networks running reliably. Funding is even more of an issue for rural electric cooperatives, small municipalities and water districts. Utilities are not in the commercial wireless business; telecom departments must fight for capital funding that normally would go to maintain or improve the primary infrastructure. And new systems must last for years: as New York states, “Capital investment and maintenance costs of . . . systems envision long life cycles (including planning and construction) of a minimum 15 years.”⁴

³ Petition at 3.

⁴ Petition at 6.

UTC agrees with New York that the Commission's stated intent in the *Third Report and Order* to mandate 6.25 kHz migration without recognition of the processes it itself put into motion puts vital services at risk unnecessarily. While the language of the *Third Report and Order* did not constitute a decision to be codified in its rules, the FCC should not disrupt its own mandate, the licensees making huge investments to comply with it, and the equipment manufacturers also investing in technology to make it possible. Equipment operating with 6.25 kHz bandwidth, while gradually appearing, is not competitively available, standardized or proven enough to justify statements encouraging licensees to simply skip the step the FCC itself spent years adopting.

II. The FCC Should Engage in a Review of the Narrowband Migration Path to Find a Better Solution.

Rather than urging early migration to even narrower discrete channels, the FCC should conduct a review to determine whether a bandplan first discussed nearly twenty years ago remains the right choice in today's wireless environment. UTC submits that it does not, and that mandated migration to specific 6.25 kHz frequency centers, at any time, would irreparably harm the PLMR community.

PLMR licensees, including utilities, certainly are interested in making efficient use of their scarce spectrum assets. However, equating "efficiency" with "narrower bandwidth" is an outmoded concept. The Commission itself has expended a large amount of policy and regulatory effort in recent years on just the opposite: broadband. Commercial wireless networks are moving to new

generations of technology that use frequencies flexibly, but serve more subscribers. Another development in which the FCC has shown great interest is spread spectrum technology – again, in the opposite direction from narrower channel centers. This migration, while logical a decade or more ago, is an idea whose time has passed.

“Efficiency,” in the case of critical infrastructure industries (CII) and Public Safety, should not be measured by the number of users per channel in any case. The public benefit in their spectrum use is derived from the protection of life, safety and property and reliable public services that their wireless systems make possible. However, UTC’s CII members want to have access to new wireless technology choices to make better use of assigned frequencies. Given the direction of all other wireless technology, mandated narrowband migration will deprive them of opportunities for better, smarter and more integrated systems, at lower cost due to greater economies of scale. While PLMR equipment manufacturers have invested heavily in continuing to serve customers on these frequency bands, they are only a subset of the larger wireless industry – most manufacturers of commercial devices do not even consider serving these bands in spite of the tens of millions of end users on them.

UTC urges the FCC not to turn the PLMR bands into a backwater due to rigid adherence to an outmoded bandplan. UTC’s preference would be to retain the 12.5 kHz offset frequencies already in heavy use, while solving coordination issues and reducing the likelihood of massive congestion and interference by

removing the discrete 6.25 kHz channels from the frequency list.⁵ With this regulatory certainty, new generations of technology will emerge to make increasingly better use of available frequencies, instead of choices being narrowed because of a peculiar regulatory structure. If elimination of the offset 6.25 kHz channels themselves is not a possibility, the Commission at the least should decide not to mandate further narrowbanding. Instead, it should engage in a discussion with the PLMR community concerning a path to greater efficiency more in line with its policies for other wireless services.⁶

III. Conclusion

UTC supports generally New York's Petition for Reconsideration of the *Third Report and Order* in this docket, especially its opposition to the FCC's stated intent to mandate 6.25 kHz migration in the 150-512 MHz PLMR bands and the agency's encouraging licensees to skip over its own currently mandated migration to 12.5 KHz operations. UTC members' huge investment in time and money would be stranded by such an early decision. Further, UTC recommends that Commission decide not to mandate 6.25 kHz operation at any time. Instead,

⁵ See, 47 C.F.R. §§ 90.20, 90.35.

⁶ UTC notes that this would not be the first time the FCC has recognized the greater efficiency possible in wider channels. Rules for the 220-222 MHz service, originally designed for 5 kHz use, permit aggregation of channels to enable wider-band operations (*see* 47 C.F.R. § 90.733(d)); rules governing the 1427-1432 MHz telemetry service are similar (*see* 47 C.F.R. § 90.259(b)(10)), as examples.

it should engage in a discussion with the PLMR community concerning alternative measures, given the many years since "refarming" was undertaken and the major changes in wireless technology in the intervening time.

Respectfully submitted,

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

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June 21, 2007