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

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

REPLY COMMENTS OF THE CITY OF NEW YORK

The City of New York ("City"), on behalf of the City's Police Department ("NYPD"), Fire Department ("FDNY") and Department of Information Technology and Telecommunications ("DoITT") submits these reply comments addressing the responses to its Petition for Reconsideration[1] of the Commission's *Third Report and Order* in the above proceeding. The comments support the Reconsideration Petition and demonstrate a compelling need for the Commission to conduct a rulemaking proceeding and thereby establish a thorough record prior to mandating that licensees migrate to a 6.25 kHz narrowband technologies standard. An opportunity should be afforded public safety and other licensees, manufacturers, frequency coordinators and other interests to analyze the challenges presented by a transition to 6.25 kHz technologies and to prepare sound migration plans. To do otherwise will impose unwarranted costs, hamper interoperable public safety communications and severely impede emergency response.

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[1] *Petition for Reconsideration* of the City of New York, WT Docket No. 99-87, RM-9332, filed May 18, 2007, 72 Fed. Reg. 31329 (June 6, 2007), 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 (March 26, 2007) 72 Fed. Reg. 19387 (April 18, 2007).

Summary of Comments

The Commission's *Third Report and Order* examined the circumstances in which licensees would be obligated to use equipment providing 6.25 kHz narrowband capabilities in the 150-174 MHz or 421-512 MHz bands. The decision stated that 12.5 kHz technology is a transitional step in the migration to a 6.25 kHz technologies mandate. While committing to monitor the work of standards-setting organizations and equipment manufacturers, the Commission stated that when it determines the technology has matured sufficiently enough that equipment is available for testing, it "will expeditiously establish a transition date" to 6.25 kHz technologies. The Commission recommended that licensees consider migrating directly from 25 kHz technology to 6.25 kHz technology, instead of pursuing the existing mandate to transition to 12.5 kHz technologies by January 1, 2013.[2] As outlined below, the City's Petition for Reconsideration has received broad support from equipment manufacturers, frequency coordinators and both public safety and non-public safety licensees.

The State of California concurred with the Reconsideration Petition. California emphasized that, while it recognized that 12.5 kHz is an interim step, it is a consequential step for resource-strapped public safety agencies. Transition must take place over many years; equipment deployed prior to a 6.25 kHz mandate must be allowed to serve out a normal life-cycle of at least 10 years. California encouraged the Commission to initiate a Further Notice of Proposed Rulemaking addressing the technical, financial, interoperability and other challenges that will assist preparing reasoned migration paths.

[2] Third Report and Order at paragraph 11.

The Utilities Telcom Council ("UTC"), which represents the nation's electric, gas, water and steam utilities and natural gas pipelines in communications matters, endorsed the Reconsideration Petition. UTC's comments emphasized the City's concerns about a reasoned migration path to 6.25 kHz technologies prior to any mandate. UTC stated that the challenges faced by the public safety agencies are found in the utility industry. Specifically, the utilities industry also requires reliable and proven equipment to protect the critical infrastructure delivering utility service to individuals and businesses. UTC stated that the Commission should reevaluate the 6.25 kHz technologies mandate in terms of whether it is consistent with the growing need for broadband; and that spectrum efficiency is but one element of promoting optimal spectrum use.

The Association of American Railroads ("AAR") stated that it would be onerous and wasteful to render investment in 12.5 kHz equipment obsolete via a 6.25 kHz mandate before the end of such equipment's useful life. Significantly, AAR's comments noted that, as a result of the *Third Report and Order,* certain AAR members have suspended their transition to 12.5 kHz equipment, thereby placing at risk the transition from 25 kHz. AAR agrees with the City that 6.25 kHz equipment has not yet reflected viable and proven technology for railroads to rely on in the VHF/UHF and Subpart L (UHF-TV Sharing) bands. According to AAR, the lack of interoperability standards along with the technical complexities surrounding 6.25 kHz present severe challenges and preclude any mandate until such barriers are resolved.

The Land Mobile Communications Council (LMCC) stated that the City's concerns are shared by Business/Industrial/Land Transportation licensees. Licensees with large fleet operations, such as utilities, railroads, airlines and overnight delivery operations, have committed enormous investment toward transitioning to 12.5 kHz technologies. These investments will be lost if a mandate to 6.25 kHz technologies is imposed without due consideration by the Commission of the financial impact of such a mandate. As many LMCC members are certified frequency coordinators, the comments note not only the complexity 6.25 kHz presents, but that current work, to assure licensees are free from interference in the 12.5 kHz transition, will be placed at risk by a new mandate.

Motorola, Inc. ("Motorola") similarly supports the Reconsideration Petition. According to Motorola, the *Third Report and Order* has created uncertainty in the marketplace regarding the transition to narrowband equipment. Motorola agrees that the Commission should clarify that any mandate will be imposed only after full notice and comment that allows opportunity to examine the financial and operational impact on licensees. Motorola further states that the Commission's statements conveying intent to expedite the transition to more efficient technologies are having the opposite effect, insofar as users require certainty that their investments in such technologies will not be undermined by new precipitous mandates.

The Enterprise Wireless Alliance ("EWA") related that licensees and users must have the opportunity to develop rational, cost-effective approaches toward the integration of advanced, more efficient technologies. With multiple paths able to enhance technical

technologies. EWA urges the Commission to continue to embrace efficiency standards, which include equivalency alternatives, set forth in current rules rather than particular technologies.

The Nassau County Police Department emphasized that public safety agencies are only now transitioning to 12.5 kHz efficiencies. The Department itself is in the midst of a large public safety radio system capital project consisting of twenty four sites and over four thousand units, all utilizing 12.5 kHz technologies. This important investment cannot be compromised. A careful examination of how best to assist public safety in the context of any transition to 6.25 kHz must be undertaken first.

The Nassau County Fire & Rescue Services urged the Commission to rescind its decision and examine the extreme challenges public safety communications faces and how its decision will impose even greater burdens. It stated that the Commission's decision undermines public safety wireless communications and will disrupt operations. The Commission's intention to force agencies to abandon investment in favor of 6.25 kHz technologies is a federal mandate unaccompanied by any acknowledgement of the resources necessary to comply. Nassau County Fire & Rescue Services emphasizes that that there is no tested base of 6.25 kHz equipment meeting public safety standards in the VHF/UHF and Subpart L (UHF-TV Sharing) bands.

The Commission Should Commence a Proceeding Examining 6.25 kHz Technology

New York City's Reconsideration Petition and the responding comments reflect a divide between the Commission's perspective that a transition to 6.25 kHz technologies can be somewhat readily accomplished, and the view of licensees, manufacturers and frequency coordinators that this endeavor presents significant concerns, and that a reasoned migration path must be developed. The challenge is not simply that 6.25 kHz technologies have not matured, but that to move forward without full consideration of the status of 6.25 kHz technologies and user requirements, as can only be established through a comprehensive rulemaking proceeding, could actually result in a setback for public safety communications, which might then harm emergency response.

The Commission should evaluate how the transition to 6.25 kHz technologies will (or will not) serve various user needs and whether it will promote (or deter) effective and efficient operations. With interoperability a national priority, communications systems are now being deployed based at 12.5 kHz efficiency. An expeditious transition to 6.25 kHz technologies, or even implicitly encouraging licensees to do so, will disrupt or even cause a wholesale abandonment of existing networks, thereby stranding investment in communications systems whose life cycles are not complete. Given the operational and financial stakes, there should be a record reflecting the availability and reliability of "backward" compatible 25 kHz and12.5 kHz equipment. The viability of legacy equipment is a critical factor to an effective transition and must be available before any a mandate can be imposed.

As noted, interoperability is a major communications objective that will be placed at risk as a result of this Order. Underlying the interoperability question is a broader concern regarding whether 6.25 kHz equipment will be capable of operating in the range of environments encountered by public safety. One size does not fit all; meaning, 6.25 kHz equipment must be shown to be capable of operating in varied topography and conditions and fulfill varied agency requirements. Equipment and infrastructure must be adequately field tested and proven before being placed into service. There is no record that 6.25 kHz meets these requirements in the VHF/UHF and Subpart L (UHF-TV Sharing) bands. To encourage its use under current circumstances presents the danger that equipment cannot be relied upon, again potentially undermining emergency response.

The responding comments convey the complexity and additional expense that will accompany any 6.25 kHz technologies mandate and the risk agencies face in attempting to formulate migration paths when so little is known. The frequency analysis and coordination efforts that must assure users that their areas of operations will remain intact and free from interference is extremely complex, with work currently centered on 12.5 kHz not 6.25 kHz technologies. The breadth of the equipment and infrastructure involved and the likelihood that 6.25 kHz technologies will require more sites at additional costs, compels a rulemaking proceeding, in which extensive requirements analyses, engineering and system development work can be thoroughly evaluated and commented upon by interested parties. Only through such a proceeding, can the

Commission adequately consider commencing a transition to 6.25 kHz technologies, and establish a migration path that accounts for the associated challenges.

A core objective of the January 2013 mandate to 12.5 kHz efficiency was affording state and local governments, as well as other land mobile licensees, adequate opportunity to finance, plan and deploy replacement infrastructure and equipment. That opportunity and the ongoing efforts to comply are now seriously undermined by the Commission urging licensees to transition directly to 6.25 kHz equipment. It is also a contradiction; there is no 6.25 kHz equipment in the VHF/UHF and Subpart L (UHF-TV Sharing) bands available that meets public safety, utility, railroad and other interests' standards.

New York City urges the Commission, in examining its intentions with regard to 6.25 kHz technologies, to consider how its proposals and actions ultimately assist emergency response, and land mobile services in general. Pursuit of spectral efficiency does not translate directly to improving the ability of public safety agencies to dispatch the appropriate resources in the most expeditious manner to the individual who needs help. The significant challenges detailed in the Petition for Reconsideration and the responding comments reflect the substantial challenges that must be discerned and

analyzed. Otherwise, serious detriment to emergency response may result.

For these reasons, New York City urges the Commission to seek and establish an extensive record by commencing a Further Notice of Proposed Rulemaking examining the transition to use of further narrowband technologies.

Respectfully submitted,

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Certificate of Service

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