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FEDERAL COMMUNICATIONS COMMISSION  
Washington, D. C. 20554

MAR 8 2001

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of	)	
	)	
Reallocation of the 216-220 MHz,	)	ET Docket No. 00-221
1390-1395 MHz, 1427-1429 MHz,	)	RM-9267
1429-1432 MHz, 1432-1435 MHz,	)	RM-9692
1670-1675 MHz and 2385-2390 MHz	)	RM-9797
Government Transfer Bands	)	RM-9854

**COMMENTS OF THE  
LAND MOBILE COMMUNICATIONS COUNCIL**

The Land Mobile Communications Council ("LMCC") hereby submits its  
Comments on the *Notice of Proposed Rulemaking* in the above-captioned  
proceeding.<sup>1</sup>

**I. INTRODUCTION**

LMCC is a non-profit association of organizations representing virtually all  
users of land mobile radio systems, providers of land mobile services, and  
manufacturers of land mobile radio equipment. LMCC acts with the consensus,  
and on behalf, of the vast majority of public safety, business, industrial and land  
transportation radio users on the several private land mobile radio (PLMR)

<sup>1</sup> Reallocation of the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435  
MHz, 1670-1675 MHz and 2385-2390 MHz Government Transfer Bands, *Notice of Proposed  
Rulemaking*, ET Docket No. 00-221, FCC 00-395, released November 20, 2000 (the "Notice",  
"NPR").

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frequency bands regulated by the Commission. Membership includes the following organizations:

- Aeronautical Radio, Inc. (ARINC)
- American Association of State Highway and Transportation Officials (AASHTO)
- American Automobile Association (AAA)
- American Mobile Telecommunications Association, Inc. (AMTA)
- American Petroleum Institute (API)
- Association of American Railroads (AAR)
- Association of Public Safety Communications Officials-International, Inc. (APCO)
- Central Station Alarm Association (CSAA)
- Forest Industries Telecommunications (FIT)
- Forestry-Conservation Communications Association (FCCA)
- Industrial Telecommunications Association, Inc. (ITA)
- Intelligent Transportation Society of America, Inc. (ITSA)
- International Association of Fire Chiefs (IAFC)
- International Association of Fish and Wildlife Agencies (IAFWA)
- International Municipal Signal Association (IMSA)
- MRFAC, Inc. (MRFAC)
- National Association of State Foresters (NASF)
- Personal Communications Industry Association (PCIA)
- Taxicab, Limousine, and Paratransit Association (TLPA)
- Telecommunications Industry Association (TIA)
- United Telecom Council (UTC)<sup>2</sup>

The above membership includes all frequency advisory committees (FACs) currently certified to manage private land mobile spectrum and to advise the FCC on its use. Seeing the increasing congestion on current land mobile spectrum bands, LMCC, on behalf of its member organizations, has long urged the Commission to allocate additional spectrum for private wireless services.

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<sup>2</sup> UTC notes that it plans to file separate comments in this proceeding.

## II. DISCUSSION

In the instant Notice, the Federal Communications Commission ("FCC", the "Commission") proposes to allocate several small frequency bands remaining from past transfers of spectrum from federal government to non-government use. The bands were among spectrum transferred pursuant to the Omnibus Budget Reconciliation Act of 1993<sup>3</sup> and the Balanced Budget Act of 1997.<sup>4</sup> The Notice furthers the implementation of the Commission's *Spectrum Policy Statement of November 1999*,<sup>5</sup> which discussed the possible allocation of many of these bands.

Among the recommendations in the *Spectrum Policy Statement* was the potential allocation of a small amount of spectrum in the 1390-1435 MHz band for a Land Mobile Communications Service (LMCS), an expansion of private land mobile service in response to LMCC's long-standing request for much-needed new private wireless spectrum. After the return of the 1395-1400 MHz band to the federal government and the allocation of the 1429-32 MHz band to the Wireless Medical Telemetry Service (WMTS), the spectrum now under consideration includes 1390-95 MHz, 1427-29 MHz and 1432-35 MHz.<sup>6</sup> LMCC limits its comments in this proceeding to this 10 MHz of total spectrum among the various bands discussed in the Notice.

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<sup>3</sup> Pub. L. 103-66, 107 Stat. 312 (1993).

<sup>4</sup> Pub. L. 105-33, 111 Stat. 251 (1997).

<sup>5</sup> Principles for Reallocation of Spectrum to Encourage the Development of Telecommunications Technologies for the New Millenium, *Policy Statement*, 14 FCC Rcd 19,868 (1999).

<sup>6</sup> Notice at ¶ 19.

**A. LMCC Urges the Creation of a Land Mobile Communications Service**

The Notice includes the proposed LMCS as one of three named, and one other detailed, options for the 1390-95 MHz, 1427-29 MHz and 1432-35 MHz bands, and incorporates much of an LMCC proposal for the LMCS into that option.<sup>7</sup> In the LMCC proposal, 1392-1395 MHz would be paired with 1432-1435 MHz, a band mandated for auction before September 2002. Pairing these bands would create a small amount of spectrum usable for a variety of voice and data communications, the sorts of services now employed or likely to be developed for use by private wireless eligibles. LMCC recommended that this auction be limited to entities proposing Band Manager services, with limitations on use of licensed spectrum by affiliated entities, but no limitations on the number of licenses obtainable by a single entity. Rules for these licenses should include a requirement that Band Managers coordinate among themselves to avoid interference between lessees and between lessees and incumbent government users.

The LMCC proposal also suggests that 1390-1392 MHz be paired with 1427-1429 MHz. This spectrum would not be auctioned, but would be licensed on a site-specific basis through the use of frequency coordination, a licensing method proven successful in meeting the specialized needs of private wireless users. Licenses would be granted according to demonstrated need.

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<sup>7</sup> LMCC's proposal, submitted some months prior to the release of the Notice, is attached to these comments as an Appendix.

Option One of the Notice follows LMCC's proposal closely. However, there is a major difference in the eligibility proposed for the portion of the LMCS spectrum that would be auctioned. The NPR proposes that this auction be open to all interested entities, including CMRS providers.<sup>8</sup> LMCC's proposal calls for an auction limited to Band Managers only, for which there is precedent in the 700 MHz band.

LMCC urges the FCC to retain its proposal to limit auction eligibility to Band Managers, and to prohibit CMRS services by lessees. To do otherwise would negate the Commission's purpose in creating Option One, namely the creation of a Land Mobile Communications Service designed to help fulfill the need for additional private wireless spectrum.

As LMCC has noted to the FCC on numerous occasions, neither geographic licensing nor traditional competitive bidding methods are capable of meeting private wireless spectrum needs. PMRS users generally require specialized, and often quite small, operating areas that can only be satisfied through site-specific licensing. Competitive bidding entails large costs in obtaining spectrum, with much of the resulting geographic area unwanted by the private wireless user. Those costs must be passed on to customers of completely unrelated industries. Because the business of private wireless is not the telecommunications business, private wireless eligibles generally cannot compete in a spectrum auction with commercial wireless providers whose

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<sup>8</sup> Notice at ¶ 31.

business plans include means of recouping such costs through charges to third-party subscribers.

The concept of Band Managers is an acceptable hybrid of competitive bidding with licensing suited to private wireless needs. Under this formula, those interested in managing spectrum may participate in the auction, becoming Band Manager licensees. The rest of the PMRS community then is able to acquire spectrum tailored to specific needs, including such factors as power levels, coverage areas, numbers of channels and technology in use. The Band Manager remains responsible for managing the spectrum to avoid harmful interference among its lessees, some of which may operate safety-related critical infrastructure systems.

LMCC recognizes that a portion of the spectrum proposed for LMCS (i.e. 1432-1435 MHz) is mandated for auction. To best use that spectrum, LMCC recommends pairing it with spectrum not mandated for auction (i.e. 1392-1395 MHz), and agrees that both should be auctioned together. However, the only form of competitive bidding that can be true to the spirit of a Land Mobile Communications Service for private wireless is an auction limited to Band Managers. An open auction, without doubt, will result in spectrum acquired almost exclusively, if not entirely, by commercial providers, who are able to justify larger acquisition costs. Commercial providers offering yet another CMRS service to the general public is specifically of no use in meeting the needs of industrial and business private wireless end users. A spectrum allocation for private wireless which results in no private wireless use, hardly meets the FCC's

goals in creating this option. LMCC therefore urges the Commission to limit eligibility for a 1392-1395/1432-1435 MHz auction to Band Managers.

Insofar as the four (4) MHz portion of the proposed allocation is concerned, LMCC submits that this would begin to serve the burgeoning needs of business and industry for site-specific licensing. Many private wireless users have the need for low power, coordinated systems in order to satisfy their internal productivity and safety requirements.

**B. Option One Offers the Most Efficient Use of 1.4 GHz Spectrum.**

LMCC strongly supports the LMCS option -- Option 1 -- as the plan most likely to result in efficient and rapid use of the bands listed. Other options, while seeking to meet the diverse needs of other applicants for this spectrum, would result in inefficient use of pieces of the spectrum under consideration, or in sharing arrangements that would lead to high levels of harmful interference. Again, the result would be inefficient use, or spectrum more or less unusable by services to which it was allocated.

Option Two proposes an exclusive allocation to utility telemetry at 1427-1429 MHz, along with co-primary status in the 1429-1432 MHz band with WMTS.<sup>9</sup> The same pairing and competitive bidding would occur in the 1392-1395/1432-1435 MHz band. 1390-1392 MHz would be left "for fixed and mobile services on an unpaired basis."<sup>10</sup>

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<sup>9</sup> Notice at ¶ 32.

<sup>10</sup> *Id.*

LMCC submits that this option would create a large amount of spectrum for a single use, and would leave the unpaired 1390-1392 MHz band with little usefulness. The *Notice* does not indicate who the FCC believes would be interested in this small bit of spectrum, and LMCC is unaware of any equipment manufacturer that would undertake the necessary cost to provide equipment for an unpaired, unspecified 2 MHz service. LMCC's proposal, on the other hand, would allow for coordinated, flexible use of these bands, including use by telemetry systems. Moreover, Option One would raise the status of utility telemetry to co-primary in the 1429-1432 MHz bands. WMTS and utility telemetry have already indicated that they can share spectrum, and LMCC believes telemetry would be adequately served in this manner.

LMCC opposes Options Three and Four because each would require sharing between PMRS operations and the feeder links of non-voice, non-geostationary mobile satellite systems ("Little LEOs"). The private wireless community does not believe successful sharing is possible between land mobile and satellite services, and is greatly concerned that the likely large amounts of harmful interference between incompatible systems would render the shared bands useless. LMCC notes that private wireless spectrum is needed throughout the country, and that satellite systems are likely to focus on large markets; therefore, limiting little LEO operations on shared spectrum to sparsely populated areas would solve the needs of neither the little LEOs nor private wireless. Finally, LMCC notes NTIA's concerns regarding space-to-earth operations in the 1427-1432 MHz band. LMCC appreciates the Commission's efforts to meet

diverse needs, but submits that either of these options would amount to a compromise that satisfies no one.

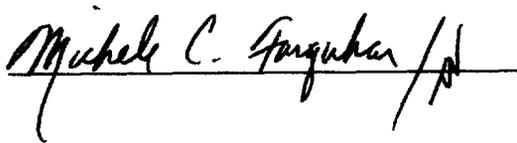
### III. Conclusion

LMCC strongly recommends the creation of a Land Mobile Communications Service in the above-mentioned frequency bands and adoption of the FCC's Option One for this spectrum. However, LMCC urges that an auction of the paired 1392-1395/1432-1435 MHz portion be limited to Band Managers and non-CMRS services.

Respectfully submitted,

**LAND MOBILE COMMUNICATIONS  
COUNCIL**

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A handwritten signature in black ink, reading "Michele C. Farquhar" with a stylized flourish at the end, positioned above a horizontal line.

Michele C. Farquhar, Esq.  
President

March 8, 2001

**Proposal for Land Mobile Communications Service  
1390 - 1435 MHz  
LMCC Land Mobile Communications Service Task Force**

**Background**

Representatives of the LMCC met with OET staff April 26, 2000 to discuss the proposed Land Mobile Communications Service outlined in the FCC's *Policy Statement* on spectrum reallocation, released November 22, 1999. The spectrum under consideration, portions of the 1390-1435 MHz band, has been requested for allocation to PMRS land mobile services by the LMCC in its 1998 Petition for Rulemaking, outlining the critical need for additional private land mobile spectrum. The band has also been requested by other parties, and portions were under consideration for the Wireless Medical Telemetry Service. LMCC was requested to develop a licensing proposal for remaining spectrum once the medical telemetry allocation was decided.

**Proposal**

Following the FCC's allocation to the Wireless Medical Telemetry Service, the following portions of this band remain available for re-allocation:

- 1390-1395 MHz, currently reserve spectrum until 2006, with 17 military radar installations protected until 2013;
- 1427-1429 MHz, currently reserve spectrum until 2006;
- 1432-1435 MHz, mandated for auction by September 30, 2002.

These bands total 10 MHz, with separation of 37-40 MHz between the upper and lower portions. LMCC believes that this spectrum, even with incumbent government use in some areas, lends itself to paired licenses that could be used for a variety of services by PMRS eligibles and other entities interested in the spectrum. LMCC makes the following recommendations:

1. All of the 10 MHz should be re-allocated at the same time to a Land Mobile Communications Service, in time to meet the September 2002 auction mandate for 1432-1435 MHz.
2. Should the congressional mandate to auction 1432-1435 MHz remain in place, 1392-1395 MHz should be paired with 1432-1435 MHz and auctioned using a band manager framework. LMCC recommends 6 licenses of .5 MHz paired (1 MHz total), in geographic areas no larger than the 52 MEAs. To create a more competitive auction, there should be no limit on the number of licenses that could be acquired in each market, and no restriction on affiliate leasing by band managers. However, eligibility for the auction should be limited to PMRS eligibles and no CMRS

services should be permitted to be offered by lessees of the spectrum.

3. 1390-1392 MHz should be paired with 1427-1429 MHz and licensed on a site-specific basis according to demonstrated need, with applications to be submitted for frequency coordination.
4. Rules for the entire 10 MHz of spectrum should remain flexible to allow development of new technologies and licensing to a wide variety of service providers. However, protection criteria should be developed to provide adequate protection to government systems entitled to continued use of the band. Rules should also require coordination among band manager licensees, as the potential for interference will increase with the number of licensees and differing technologies in use. Terms and/or construction requirements should be flexible enough to allow manufacturers sufficient time to develop equipment for use in this band.

Additional work is needed to determine the level of incumbency in the band and appropriate protection criteria.

LMCC appreciates this opportunity to recommend a framework for the Land Mobile Communications Service and looks forward to working with OET and the Commission in its re-allocation efforts.

**Note:** the above proposal has been adopted by the full LMCC, except that the Personal Communications Industry Association does not support the proposed lack of restrictions on affiliate leasing for band managers.