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JAN 30 1995

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

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of	)	
	)	
Amendment of Parts 2 and 15	)	
of the Commission's Rules	)	ET Docket No. 94-124
to Permit Use of Radio	)	RM-8308
Frequencies Above 40 GHz	)	
for New Radio Applications	)	

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To: The Commission

**COMMENTS OF UTC**

Pursuant to Section 1.415 of the Commission's Rules, UTC<sup>1/</sup> hereby submits its Comments on the Notice of Proposed Rule Making (NPRM), FCC 94-273, released November 8, 1994, in the above-captioned proceeding. In this proceeding, the Commission proposes to open a number of "millimeter wave" frequency bands above 40 GHz for both licensed and unlicensed use.

**I. Background**

UTC is the national representative on communications matters for the nation's electric, gas, and water utilities and natural gas pipelines. Approximately 2,000 such entities are members of UTC, ranging in size from small rural electric cooperatives and water districts serving a few thousand consumers, to large combination electric-gas-

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<sup>1/</sup> UTC, the Telecommunications Association, was formerly known as the Utilities Telecommunications Council.

water utilities serving millions of consumers. Regardless of size, all utilities and pipelines depend upon reliable and secure communications facilities to help fulfill their public service obligations and to provide essential services to the public. UTC is therefore interested in any proceeding in which the Commission proposes to make spectrum available for new communications technologies.

**II. UTC Supports Allocation of Additional Spectrum for Unlicensed Devices on An Exclusive Basis**

In this proceeding, the Commission is proposing to allocate a substantial amount of spectrum above 40 GHz for use in unlicensed radio devices under Part 15 of the Commission's Rules. UTC agrees with the Commission's assessment that the availability of radio bands specifically reserved for unlicensed devices has stimulated rapid commercial development of new technologies such that today "millions of spread spectrum devices are used by numerous businesses and other users for such diverse applications as remote meter reading, utility load management, voice-secure cordless telephones and radio local area networks."<sup>2/</sup> UTC further agrees that allocation of additional spectrum for unlicensed technologies will likely promote development of new

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<sup>2/</sup> NPRM, para. 7.

applications, facilitate technology transfer from the military sector, and promote United States competitiveness by enabling development of technology for export.

UTC also agrees with the Commission's analysis that it should continue to make spectrum available for unlicensed devices because "some services that would be provided in unlicensed bands may not be optimally provided in licensed bands because they have the characteristics of a public good." As noted by the Commission, allocating all spectrum to licensed use would result in under-provision of services that could not be efficiently provided as a fee-based service. For example, some utilities are examining use of low power radio devices within the home to relay pricing and usage information among appliances, one or more metering devices (e.g., electric, gas and/or water), and a single communications "gateway" from the home to the utility's offices. This type of in-home local area network would not lend itself to service by a "commercial" radio provider, but would be optimally provided on frequencies either licensed to the utility or made available on an unlicensed basis.

However, unlike other bands that have been "allocated" for Part 15 use, such as the 902-928 MHz band, the Commission must ensure that any future bands allocated for

unlicensed devices will not be allocated to incompatible licensed services. For example, in PR Docket No. 93-61, the Commission proposed to adopt rules for the licensing of high-power automatic vehicle monitoring systems in the 902-928 MHz band less than four years after amending the rules to further encourage the development of sophisticated Part 15 devices in this band.<sup>3/</sup> The Commission's proposals in Docket 93-61 have severely eroded public confidence in unlicensed devices. Therefore, before manufacturers develop new products for an unlicensed band, and before users invest any significant amounts in unlicensed products, the Commission must provide assurances that it will preserve the spectrum for unlicensed use.

**III. The Commission Should Not Use Competitive Bidding As A Means of Allocating Spectrum**

The Commission is proposing to allow the licensed bands above 40 GHz to be used in any of the broad range of services currently allowed under the allocation table (e.g., fixed, mobile, and broadcasting). These uses would be collectively known as the "Licensed Millimeter Wave Service," with service rules to be incorporated in Part 21.

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<sup>3/</sup> Notice of Proposed Rule Making in PR Docket No. 93-61, FCC 93-141, released April 9, 1993.

In order to permit flexibility of usage, the Commission is proposing to define licensing rules based on what it believes will be the dominant use of the spectrum, rather than defining licensing rules around a prescribed use of the spectrum. The Commission believes services in the millimeter range will be technically and operationally similar to the Local Multipoint Distribution Service (LMDS) at 28 GHz, and therefore proposes licensing rules modeled after that service -- namely, large (400-1000 MHz) blocks of contiguous spectrum licensed on a Major Trading Area (MTA) basis. The Commission concludes that the principal use of millimeter wave spectrum under this licensing scheme would be for "commercial" service, and therefore proposes to use competitive bidding to assign licenses.

Once again, the Commission is proposing to use competitive bidding as a means of allocating spectrum, contrary to the explicit provisions of Section 309(j) of the Communications Act of 1934, as amended. UTC previously objected to the Commission's proposal, in ET Docket No. 94-32, to allocate through competitive bidding the initial 50 MHz of spectrum to be acquired from the Federal Government pursuant to the Omnibus Budget Reconciliation Act of 1993.<sup>4/</sup> Once again, the Commission is proposing to

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<sup>4/</sup> See Comments of UTC, ET Docket No. 94-32, filed December 19, 1994, and Reply Comments of UTC, filed January 6, 1995.

delegate to the auction block its statutory obligation to allocate spectrum "in the public interest, convenience, and necessity."

Section 303 of the Communications Act directs the FCC to "encourage the larger and more effective use of radio in the public interest," and to "[a]ssign bands of frequencies to the various classes of stations." Without making a public interest analysis as among the competing uses of the spectrum, the Commission cannot fulfill its statutory mandate to determine whether its allocation decision will encourage the "larger and more effective use of radio in the public interest."<sup>5/</sup> Likewise Section 332(a) of the Communications Act requires the FCC to consider whether its allocation decisions affecting private radio services will, among other things, "promote the safety of life and property," or "improve the efficiency of spectrum use."

For the Commission to engage in any rational assessment of the net public interest benefits, it must first be able to identify the proposed service(s). In this proceeding, as in ET Docket 94-32, it can only be said that the Commission is proposing to allocate this spectrum for "commercial" services because it assumes that under a broad

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<sup>5/</sup> 47 U.S.C. §303(g).

allocation approach most of the services to be provided would meet the statutory criteria for auctions.

Section 309(j)(6)(E) requires the Commission to continue using "engineering solutions, negotiations, threshold qualifications, service regulations, and other means to avoid mutual exclusivity in application and licensing proceedings." Under the broad allocation approach proposed in this docket, the Commission will actually increase the likelihood of mutual exclusivity among competing applicants.

Section 309(j)(7)(A) further prohibits the Commission from basing a finding of "public interest, convenience and necessity on the expectation of Federal revenues from the use of a system of competitive bidding under this subsection." The Commission cites Section 309(j)(3)(C) as support for its proposal to use competitive bidding, claiming it "will serve the public interest by recovering for the public a portion of the value of the spectrum." However, the Commission's reliance on Section 309(j)(3)(C) is misplaced because recovery of spectrum value is to be used as a factor only when the Commission designs a system of competitive bidding, not when allocating spectrum. The Commission's interpretation of Section 309(j)(3)(C) cannot be correct because it would negate the very explicit

requirement of Section 309(j)(7)(A) that an expectation of Federal revenues should not be a factor in the allocation process.

#### **IV. Conclusion**

UTC supports the allocation of spectrum for unlicensed devices, provided the Commission takes steps to protect unlicensed use from incompatible licensed services. Given the Commission's recent actions with respect to other unlicensed frequency bands, neither equipment manufacturers nor users will be likely to promote further investment in unlicensed technologies without adequate assurances that the Commission will avoid taking actions to jeopardize that investment.

UTC continues to oppose the use of "flexible allocation" schemes and competitive bidding to allocate spectrum. This approach is contrary to the explicit language of Section 309(j), and ignores the spectrum needs of radio services which produce intangible public benefits that cannot be quantified in an auctioning context. Congress was well aware that the rational use of competitive bidding should only involve like-kind

commercial service providers, and that non-commercial radio services should continue to receive adequate spectrum allocations irrespective of the expectation of Federal revenues.

**WHEREFORE, THE PREMISES CONSIDERED,** UTC respectfully requests the Commission to take action in this docket consistent with the views expressed herein.

Respectfully submitted,

UTC

By:

  
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Dated: January 30, 1995