

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

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In the Matter of)
)
Allocation of Spectrum) ET Docket No. 94-32
Below 5 GHz Transferred)
from Federal Government Use)

COMMENTS OF UTC

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TABLE OF CONTENTS

SUMMARY ii

I. BACKGROUND 1

II. IT WOULD NOT BE APPROPRIATE TO BROADLY ALLOCATE SPECTRUM FOR ANY AND ALL SERVICES 2

III. THE FLEXIBLE ALLOCATION APPROACH IS CONTRARY TO THE COMMISSION'S AUCTIONING AUTHORITY 6

IV. FLEXIBLE ALLOCATIONS COULD BE ADOPTED IF DISCRETE BANDS ARE MADE AVAILABLE FOR "COMMERCIAL" AND "PRIVATE" RADIO SERVICES 9

V. COMMENTS ON DISCRETE ALLOCATION PROPOSALS 11

 A. 2390-2400 MHz 11

 B. 2402-2417 MHz 13

 C. 4660-4685 MHz 16

VI. CONCLUSION 16

SUMMARY

The Commission's proposal to make a generic Fixed and Mobile services allocation for the three bands recently transferred from the Federal Government is inconsistent with sound spectrum management and the competitive bidding provisions of the Communications Act.

The FCC's generic allocation proposal omits a fundamental step in the allocation calculus: namely, a comparative evaluation of the public interest benefits provided by the various types of services that could be allocated in this spectrum. Without making a public interest analysis as among the competing uses of the spectrum, the FCC 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."

A balancing of competing spectrum proposals is also required by Section 332(a) of the Communications Act, which 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." The structure of

the FCC's proposal permits no weighing of the public interest benefits of various services. For the FCC to engage in any rational assessment of the net public interest in allocating these bands, it must first be able to identify the proposed service(s).

A review of Section 309(j), together with other provisions of Title III, indicates that Congress recognized a clear distinction between "commercial" radio services and "private" radio services, and contemplated separate frequency allocations for each service. The authorization of competitive bidding was only intended to change the way the FCC selects from among mutually-exclusive applicants in commercial radio services, and was not meant to diminish the ability of private service applicants to secure frequency assignments or to influence the allocation process.

UTC reiterates its recommendation that the 2390-2400 MHz band be allocated for use in advanced private communications systems. There are numerous critical energy conservation and management applications that warrant a private allocation of spectrum. Additionally, the 2402-2417 MHz band should be specifically allocated for unlicensed use.

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COMMENTS OF UTC

Pursuant to Section 1.415 of the Commission's Rules, UTC^{1/} hereby submits its Comments on the Notice of Proposed Rule Making, FCC 94-272, released November 8, 1994, in the above-captioned proceeding. In this proceeding, the Commission proposes to allocate three bands of spectrum (2390-2400 MHz, 2402-2417 MHz, and 4660-4685 MHz) recently transferred from the Federal Government.

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-water utilities serving millions of consumers. Regardless

^{1/} UTC, The Telecommunications Association, was formerly known as the Utilities Telecommunications Council.

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 filed Comments in this proceeding in response to the Notice of Inquiry, FCC 94-97, released May 4, 1994. UTC supported the Comments filed by the Coalition of Private Users of Emerging Multimedia Technologies (COPE), which, among other things, recommended allocation of the 2390-2400 MHz band, and potentially the 2402-2417 MHz band, for use in private, non-commercial communications systems. UTC pointed out the many unique communications requirements facing utilities and pipelines that cannot be adequately met by commercial service providers.

II. It Would Not Be Appropriate to Broadly Allocate Spectrum for Any and All Services

The Commission has proposed an allocation approach that would designate these bands generally for Fixed and Mobile services, rather than specify these frequency bands for particular uses. The Commission proposes to rely on market forces "to ensure that the spectrum is put to its best and most valued use and that the greatest benefit to the public is attained." Under such a broad allocation approach, the Commission believes that most of the services

would likely meet the statutory criteria for auctions, and it therefore proposes to make licenses available for this spectrum through competitive bidding, "to the extent possible and practicable."^{2/}

Whatever the merits of making spectrum available for broad purposes, the Commission's proposal is inconsistent with sound spectrum management and the provisions of the Communications Act of 1934, as amended.^{3/} 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." It is well-settled that in making spectrum allocations the FCC has discretion to determine whether one factor should outweigh another in the comparative analysis, or whether one service is to be preferred over another. National Association of Broadcasters v. FCC, 740 F.2d 1190, 1209-10 (D.C. Cir. 1984), WLVA, Inc. v. FCC, 459 F.2d 1286, 1303-04 (D.C. Cir. 1972), and Coastal Bend Television v. FCC, 234 F.2d 686, 690 (D.C. Cir. 1956). If the Commission's action has a factual and legal basis, the court will not overturn it.

^{2/} NPRM at paras. 8-9.

^{3/} 47 U.S.C. §151, et seq.

However, in proposing a broad, generic allocation with the assumption that the predominant use will be for commercial service, the Commission has omitted a fundamental step in the allocation calculus: namely, a comparative evaluation of the public interest benefits provided by the various types of services that could be allocated in this spectrum. 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."^{4/} The structure of the Commission's proposal permits no weighing of the public interest benefits of various services, leaving it instead to the "marketplace" to determine which services will develop in these bands.

A balancing of competing spectrum proposals is also required by Section 332(a) of the Communications Act, which 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." In the Senate report accompanying these provisions, the FCC was instructed to balance the needs of private radio users

^{4/} 47 U.S.C. §303(g).

against commercial spectrum uses, and to include in the equation the fact that "[r]adio services which are necessary for the safety of life and property deserve more consideration than the services which are more in the nature of convenience or luxury."^{5/} Significantly, although Section 332 was substantially revised by the Omnibus Budget Reconciliation Act of 1993, the directives of Section 332(a) were unchanged.

The structure of the Commission's proposal permits no weighing of the public interest benefits of various services. For the Commission to engage in any rational assessment of the net public interest in allocating these bands, it must first be able to identify the proposed service(s). At best, it could be said that the Commission is proposing to allocate this spectrum for "commercial" services since it assumes that under a broad allocation approach, most of the services to be provided in these bands would meet the statutory criteria for auctions. However, this bit of logic ignores the mandate of Section 332(a) that due consideration be given to allocations for private radio services.

Contrary to the discussion in the NPRM, the broad allocation approach proposed in this docket is not akin to

^{5/} S. Rep. No. 191, 97th Cong. 1st Sess. 14 (1981).

the spectrum reserve for "emerging technologies" adopted in ET Docket No. 92-9.^{6/} In Docket 92-9, the Commission provided a transition framework under which currently occupied spectrum could be made available to future "emerging technology" services. Docket 92-9 did not reallocate the spectrum to any particular services, nor did it establish any technical, operational or licensing rules for these "emerging technology" bands. By contrast, the Commission proposes in the present docket to establish licensing rules under which virtually any Fixed or Mobile service could be provided, subject to (1) securing a license through competitive bidding, and (2) minimal technical rules designed to prevent interference to other users.

III. The Flexible Allocation Approach Is Contrary to the Commission's Auctioning Authority

Using the flexible allocation approach described above, the Commission assumes that "most of the services to be provided in this spectrum would likely meet the statutory criteria for auctions," and therefore proposes to make licenses for this spectrum available through

^{6/} First Report and Order and Third Notice of Proposed Rule Making, 7 FCC Rcd 6886 (1992), Third Report and Order and Memorandum Opinion and Order, 8 FCC Rcd 6589 (1993), Memorandum Opinion and Order, 9 FCC Rcd 1943 (1994), Second Memorandum Opinion and Order, FCC 94-303, released December 2, 1994.

competitive bidding.^{1/} However, this semi-circular line of reasoning is inconsistent with several provisions of the Commission's statutory authority to use competitive bidding.

Section 309(j)(7)(A) of the Communications Act of 1934, as amended, provides as follows:

(7) CONSIDERATION OF REVENUES IN PUBLIC INTEREST DETERMINATIONS.--

(A) CONSIDERATION PROHIBITED.--In making a decision pursuant to section 303(c) to assign a band of frequencies to a use for which licenses or permits will be issued pursuant to this subsection, and in prescribing regulations pursuant to paragraph 4(C) of this subsection, the Commission may not base 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.

Section 309(j)(6) further provides, in pertinent part, as follows:

(6) RULES OF CONSTRUCTION.--Nothing in this subsection, or in the use of competitive bidding, shall --

(A) alter spectrum allocation criteria and procedures established by the other provisions of this Act;

(B) limit or otherwise affect the requirements of subsection (h) of this section, section 303, 304, 307, 310, or 706, or any other provision of this Act

^{1/} NPRM at para. 9.

(other than subsections (d)(2) and (3)
of this section;

* * *

(E) be construed to relieve the
Commission of the obligation in the
public interest to use engineering
solutions, negotiations, threshold
qualifications, service regulations,
and other means in order to avoid
mutual exclusivity in application and
licensing proceedings;

* * *

(emphasis added)

These provisions prohibit the Commission from basing allocation decisions on the use of competitive bidding. Indeed, Section 309(j)(6)(E) requires the Commission to take steps to avoid the need for competitive bidding by limiting the opportunity for mutual exclusivity in application and licensing proceedings.

In this proceeding, however, the Commission is proposing to allocate spectrum and establish application and service rules premised exclusively on the use of competitive bidding. Rather than making the requisite public interest findings as to which service(s) should receive spectrum allocations, the Commission proposes to simply let the "marketplace" decide through the use of competitive bidding. By proposing to make this spectrum available for any Fixed or Mobile service with only minimal

technical requirements, the Commission will increase the likelihood of mutual exclusivity among competing applicants. In short, the flexible allocation approach proposed by the Commission is flatly inconsistent with the provisions of Section 309(j).

IV. Flexible Allocations Could Be Adopted If Discrete Bands Are Made Available for "Commercial" and "Private" Radio Services

As an alternative to the Commission's flexible allocation approach premised on all applicants vying for the same spectrum, UTC recommends an allocation scheme that would, as a first step, allocate discrete band segments to "commercial" radio services and "private" radio services. Within each radio service, operations could be Fixed or Mobile, and subject to flexible technical and operational requirements.^{8/}

A review of Section 309(j), together with other provisions of Title III, indicates that Congress recognized a clear distinction between "commercial" radio services and "private" radio services, and contemplated separate frequency allocations for each service. The distinction drawn in both Section 332 and Section 309(j) between

^{8/} As noted below, however, technical and operational rules would have to take into consideration the existing uses being made of these bands.

"commercial" or "subscriber" services, on the one hand, and "noncommercial" or "private services" on the other, highlights the need for the Commission to make discrete frequency allocations for "commercial" and "private" services. If Congress intended competitive bidding to be used as a substitute for the traditional public interest findings in spectrum allocations, it would not have been necessary for Congress to limit competitive bidding to commercial radio services.

By making discrete spectrum allocations for commercial and private radio services, the Commission will ensure that private, noncommercial users of the spectrum have an adequate opportunity to secure spectrum to meet their particular requirements. The radio services currently defined in the Commission's Rules were established in fulfillment of the Commission's statutory mandate to provide for the equitable distribution of licenses in the public interest. Eligibility and operational rules have been adopted for each radio service to ensure that all entities needing radio spectrum will have fair access. For example, certain radio and television broadcast channels have been specifically reserved for noncommercial use to ensure that non-profit entities would have an opportunity to secure spectrum without having to compete in the marketplace with the generally better capitalized

commercial broadcasters. Similar commercial/noncommercial distinctions have been drawn in the Part 90 Private Land Mobile Radio Services, and between the Instructional Television Fixed Service (ITFS) and the Multichannel Multipoint Distribution Service (MMDS). Through the years, the Commission has recognized the very basic economic fact that entities proposing a commercial radio service are more likely to secure the funding and react quickly enough to secure radio licenses than entities needing only to use spectrum for noncommercial or private use.

The authorization of competitive bidding was only intended to change the way the FCC selects from among mutually-exclusive applicants in commercial radio services, and was not meant to diminish the ability of private service applicants to secure frequency assignments or to influence the allocation process. UTC therefore recommends that any flexible allocation approach include provision for discrete allocations to "commercial" and "private" radio services.

V. Comments on Discrete Allocation Proposals

In the alternative to its flexible allocation approach, the Commission has proposed allocation of the

three frequency bands in question to discrete radio services.

A. 2390-2400 MHz

UTC reiterates its recommendation that this band be allocated for use in private communications systems. In its Comments on the NOI, UTC identified several critical energy conservation and management applications that warrant an allocation of spectrum:

- o Advanced distribution automation (remote monitoring, coordination and operation of distribution and transmission components from centralized locations, including load management, advanced mobile meter reading and system control functions).
- o Mobile automated mapping and facilities management.
- o Demand side management (DSM) systems; i.e., managing the consumption of electric power and gas.
- o Transmissions to monitor and record pipeline flow and pipeline pressure indicators.
- o Real-time monitoring, alerting and control in situations involving the handling of hazardous materials.
- o Wireless slow-scan video monitoring for nuclear plant monitoring.

UTC's recommendation, as well as the corresponding request by the Coalition of Private Users of Emerging Multimedia Technologies (COPE), was virtually dismissed out-of-hand, with the notation that "[p]rivate users can receive service from commercial service providers and can

compete in obtaining spectrum on the same basis as commercial providers."^{2/}

As was amply demonstrated in COPE's "Petition for Rule Making," filed December 23, 1993, commercial service providers are unlikely to meet the unique applications, priority access, geographic coverage, security and levels of reliability/availability required in many public safety/public service environments.^{10/}Likewise, the market areas, build-out/coverage requirements, bandwidths, and competitive bidding requirements of "commercial" spectrum make it unsuited for most private radio applicants.

B. 2402-2417 MHz

The consensus of previously filed comments is that the 2402-2417 MHz band should not be allocated to a licensed commercial radio service due to the presence of Industrial, Scientific and Medical (ISM) equipment and unlicensed communications devices operating under Part 15. Utilities and pipelines, for example, currently operate many Part 15 spread spectrum communications systems in this band.

^{2/} NPRM at para. 16.

^{10/} See COPE "Petition for Rule Making," at pp. 18-21.

Both the Commission and the National Telecommunications and Information Administration (NTIA) have identified this band as having limited potential to accommodate a licensed radio service. In its August 9, 1994, Report on NTIA's Preliminary Spectrum Reallocation Report, the Commission noted that "this band provides the least potential for providing spectrum for new non-Government services."^{11/}The Commission further described the band as follows:

39. ...Although the 2400-2483.5 MHz band is not as heavily used as the 902-928 MHz band, there has recently been substantial development of, and investment in, equipment using this band. These include local area networks, wireless intercom systems, and cordless phones. It is unlikely that a licensed service would be able to share this band with these devices, which can operate with up to one watt of transmitter output power under Part 15 of our Rules. Accordingly, reallocation of this band would jeopardize the significant private sector investment already made in developing new technologies operating under Part 15. ...

* * *

50. ...Reallocation of the 2402-2417 MHz band presents little or no additional benefit to the public. This band is already used for non-Government services by the amateur radio community and by Part 15 devices. It will be extremely difficult to provide a licensed service in this band because of its heavy use by ISM equipment. Further, installing a licensed service in this band may result in a loss to the public

^{11/} "Report to Ronald H. Brown, Secretary, U.S. Department of Commerce, Regarding the Preliminary Spectrum Reallocation Report," FCC 94-213, released August 9, 1994, at para. 37.

of Part 15 spread spectrum communications equipment as well as possibly preventing use of this band for Amateur service operations. The benefits of providing short-range communications via unlicensed low power devices is generally recognized, and interest in such devices is growing. Recently there have been dramatic developments in such equipment such that it now can provide a wide and versatile array of services including cordless phone, wireless local area networks, wireless PBX, point-to-point communications, inventory tracking systems, and IVHS-related systems. In fact, the Federal Government has recognized the value of Part 15 devices and the benefits that such devices can offer its own agencies and its regulations permit Government use of unlicensed Part 15 devices. ... (footnotes omitted).

More recently, NTIA itself recommended that "the Commission should consider designating spectrum for some nonlicensed uses or establishing a new nonlicensed radio service and associated allocations," including potentially the 2402-2417 MHz band.^{12/} NTIA suggests that such approaches "could facilitate particular applications that may require a more protected environment."

UTC agrees with both agencies' assessments, and recommends that the 2402-2417 MHz band be specifically allocated for unlicensed use on a so-called "Part 16" basis. Allocation of a licensed service in this band, even

^{12/} Letter from Larry Irving, Assistant Secretary for Communications and Information, U.S. Department of Commerce, to Reed Hundt, Chairman, Federal Communications Commission, dated December 12, 1994, and filed in ET Docket No. 94-32, et al.

one that is private and with technical parameters consistent with those of the Part 15 devices operations, would offer little benefit to licensees.

C. 4660-4685 MHz

UTC takes no position at this time on the potential allocation of this band, other than to note that the Commission's proposed allocation of this band to the broadcast auxiliary service (BAS) would also be a type of "private" allocation. If other "private" users of the spectrum are expected to receive service from commercial service providers or to compete in obtaining spectrum on the same basis as commercial providers, UTC would expect no less from broadcasters who request non-broadcast spectrum allocations.

VI. Conclusion

The Commission's market-based approach to making these bands generally available for Fixed or Mobile Services is inconsistent with the Commission's statutory authority to make frequency allocations and to use competitive bidding. Flexible allocations would be appropriate only if, and at a minimum, discrete band segments are allocated for "commercial" and "private" use. In the alternative, UTC

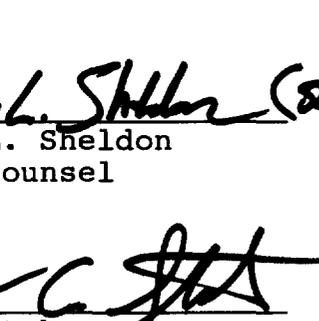
recommends that the 2390-2400 MHz band be allocated for use in advanced private communications systems. The 2402-2417 MHz band should be specifically allocated for unlicensed use.

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

Respectfully submitted,

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