

Second, UTC questions how the FCC came to the tentative conclusion, as expressed in paragraph 49 of the NPRM, that “the proposed use of some of the MAS spectrum has changed since we made our initial determination in the *Competitive Bidding Second Report and Order*.” Unless a large percentage of the applicants for the 932/941 MHz frequencies amended their applications between 1994 and 1997 to voluntarily report that they are now proposing to offer subscriber-based services, it is illogical for the FCC to assume that the “proposed use” of this spectrum “has changed” since 1994.<sup>29</sup>

Third, there is no basis for the conclusion in paragraph 49 of the NPRM that “the vast majority (over 95 percent) were filed by entities planning to provide a subscriber-based service.” In early statements, the FCC offered only an equivocal opinion that applicants were “seemingly proposing” to provide subscriber-based services. UTC questions how the FCC came to the conclusion in paragraph 49 that over 95% of the applicants for 932/941 MHz channels were, in fact, proposing to offer subscriber-based service.

For all of the foregoing reasons, UTC respectfully disagrees with the FCC’s characterization of the applications filed in 1992. Although UTC does not have access to the information or criteria used by the FCC in forming its tentative conclusions, UTC is of the strong belief that a significant percentage, if not the majority of the applications filed during this filing window, were submitted by speculators intent only on securing licenses that could be resold to entities having legitimate need for MAS. The FCC, itself,

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<sup>29</sup> In any event, since the applications were apparently destroyed in June 1996, UTC must assume the FCC has no record by which it could compare the originally proposed use of these channels with their currently proposed use.

recognized the potential for speculative filings for these channels. In its Public Notice announcing the filing procedures for these channels, the FCC expressed concern that “application mills” and speculators were targeting these new MAS channels as get-rich-quick schemes:

We also take this opportunity to correct certain misconceptions that we understand are pervasive regarding the potential use and value of multiple address system (MAS) channels for private services. Potential applicants for these channels are urged to be cautious of claims made by application preparers that MAS licensees could realize windfall profits. Private radio MAS channels are not suitable for providing a communications service to a large sector of the general public, such as channels the Commission has allocated for cellular, paging, or specialized mobile radio (SMR) services. Instead, potential users of MAS channels are limited to various types of businesses with specialized communications needs, generally internal to those businesses. For example, utilities employ MAS channels for load management and banks use MAS channels to facilitate electronic funds transfers.

Moreover, it is important to note that many MAS channels, in addition to those that are the subject of this public notice, are currently available for private radio use and can be applied for throughout the country in all but six markets. Completion of an application for an MAS license does not require special skills or qualifications other than a knowledge of the operational and technical specifics of the proposed system and its expected use.<sup>30</sup> (footnotes omitted; emphasis in the original)

After the filing deadlines for these channels, NTIA also offered its opinion that much of the application “backlog” in the 932/941 MHz bands “is believed to be speculative.”<sup>31</sup>

For the FCC to characterize such speculative filings as proposals to offer “subscriber-

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<sup>30</sup> Revised Filing Window for Point-to-Multipoint Channels in the 900 MHz Government/Non-Government Fixed Service, DA 91-1422 (mimeo no. 20798), at pp. 4-5.

<sup>31</sup> A Preliminary Look at Spectrum Requirements for the Fixed Services, ITS Staff Study, National Telecommunications and Information Administration, U.S. Department of Commerce, May 1993, p. 27.

based services” is to legitimize a practice that the FCC has condemned on many occasions.

The assumption that these applications were largely speculative, and not for “subscriber-based services,” is further supported by subsequent events. As noted in the FCC’s Public Notice announcing the 932/941 MHz filing windows, applicants having a legitimate desire to offer subscriber-based MAS services did have alternatives in many markets around the country; *i.e.*, the 928/952/956 MHz channels. The FCC made this same point in the present NPRM when it suggested that “these applicants [for the 932/941 MHz MAS channels] had ample opportunity to carry out their business plans with little additional expenditure by applying for other MAS channels.”<sup>32</sup> Assuming this to be true, and assuming there is such a tremendous pent-up demand by entities wishing to provide commercial MAS service, one would have anticipated a tremendous growth in subscriber-based MAS offerings in the last five years on the 928/952/956 MHz channels. To the contrary, UTC has seen no significant or even appreciable demand or market for subscriber-based MAS services. Thus, it is apparent that the predominant, and the most likely use of MAS, is for private, non-subscriber based services. As such, it would be contrary to Section 309(j) for the FCC to require these applicants to engage in competitive bidding for MAS licenses.<sup>33</sup>

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<sup>32</sup> NPRM, para. 57.

<sup>33</sup> It is ironic that the FCC now argues that auctions will expedite the initiation of service on these channels when the FCC delayed five years -- an entire MAS license term -- in taking any action on these applications. Even then, the FCC’s only action has been to initiate the present rulemaking proceeding, which follows by four week UTC’s filing of a “Petition for Writ of Mandamus” with the United States Court of Appeals for the District of Columbia Circuit asking for an order to compel agency action on these long-pending applications. UTC also disagrees with the FCC’s assertion, at paragraph 51 of the NPRM, that “several months would be spent simply establishing chains of mutual exclusivity among the

In order to accommodate the Commission's apparent goal of reallocating yet more spectrum that can be auctioned under the Commission's current authority, UTC recommends that the 932/941 MHz channels be allocated as follows:

- 20 channels for private, non-subscriber based services;
- 5 channels for public safety/federal government use; and
- 15 channels to be assigned through competitive bidding.

Using the best information available on the relative demand for MAS channels between "commercial" and private services, one need look no further than the FCC's experience in licensing the 928/952/956 MHz bands. According to the FCC's estimate, about 70 percent of the approximately 7,700 licenses granted in this spectrum are used by public safety, business or industrial entities to satisfy internal communications needs.<sup>34</sup> There are no readily apparent means by which this estimate can be verified, but UTC concurs that this is probably a reasonable estimate based on its experiences in coordinating MAS applications and on discussions with MAS equipment manufacturers.<sup>35</sup> Using a 70/30 split between private and commercial demand for MAS spectrum, it would be appropriate to allocate the 40 channel pairs (12.5 kHz per channel)

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applicants." Under the streamlined procedures adopted by the FCC for these applications, all pending applications were to be rank-ordered in a single nationwide lottery. UTC conservatively estimates that the FCC received over \$6 million in application fees (*i.e.*, 40,000+ feeable applications @ \$155/application), so the government should have had sufficient resources to process these applications to grant. UTC notes that the NPRM makes no reference to refund of these application filing fees. If these applications are dismissed, the FCC should, at a minimum, refund all filing fees with interest.

<sup>34</sup> NPRM, para. 12

<sup>35</sup> Comments from the manufacturers of MAS equipment would be particularly helpful in identifying the relative percentages of MAS systems that are sold for subscriber-based systems vs. those that are sold to entities proposing to use them to meet internal communications requirements.

in the 932/941 MHz band such that between 25 and 30 channels would be available for strictly private, internal use, with the remainder (10-15 channels) available through competitive bidding.

Of the 25 channel pairs that UTC recommends for allocation to private, internal use, UTC concurs with the FCC's suggestion that 5 channel pairs could be reserved for public safety and federal government use. The remaining 20 channel pairs would be reserved for private, internal use by other non-government entities, but could be accessed by federal government or public safety licensees in areas where the 5-channel public safety set-aside is exhausted.

As to the licensing area for any auctionable MAS frequencies, UTC recommends that geographic areas be no larger than Economic Areas (EAs); *i.e.*, that such licenses not be assigned on a regional or nationwide basis. In the NPRM, the FCC recommended use of EAs since they "appear to best mirror the size and development of existing MAS systems." To the extent most existing MAS systems are operated by private, internal users such as utilities and pipelines, UTC would agree with the FCC that the geographic licensing areas should correlate with the needs of the primary users of this spectrum. The service areas of utilities and pipelines do not correlate well with any arbitrarily-defined licensing areas, and many utilities (*e.g.*, water utilities) have service areas that are much smaller than EAs. Thus, if geographic licenses are to be of any interest to the current and primary users of these bands, the licensing areas must be no larger than EAs.

**VI. Licensing Rules for Private, Internal-Use MAS Systems Should Not Be Revised**

UTC recommends that the FCC retain the current site-by-site licensing rules for MAS channels that are allocated for private, internal-use. There is no practical way to identify in advance geographic licensing areas that would be compatible with the disparate operating areas of private microwave licensees. Site-by-site licensing does require additional administrative effort on the part of both the applicants and the FCC, but it promotes efficient use of the spectrum by allowing an applicant to secure licensing in just the areas over which it must have radio coverage. Site-by-site licensing, together with the use of first-come, first-served filing procedures minimizes the potential for mutually-exclusive applications, thereby expediting the initiation of service.<sup>36</sup> UTC would welcome the opportunity to work with the Commission to develop a “wide-area” licensing concept that would minimize administrative licensing burdens while retaining the flexibility currently afforded by site-by-site licensing.

UTC opposes the proposal to allow mobile remote operations in the MAS bands due to the inherent difficulties in coordinating mobile remote usage with fixed MAS systems. Similarly, UTC opposes the proposal to permit point-to-point operations in the MAS bands. Other bands are currently available in this frequency range for point-to-

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<sup>36</sup> Under Section 309(j), the FCC is required to take action to avoid the creation of mutually-exclusive situations. Geographic licensing virtually invites the filing of MX applications because entities needing spectrum in the same licensing area must compete for the license even though their actual areas of operation might be different. A review of the FCC’s own licensing records would reveal that very few MX applications are filed for MAS licenses under the current rules. The principal exceptions involve “take back” channels that are made available after a date certain. Due to pent-up demand by legitimate users, and an artificial demand among speculators created by the take-back process itself, MX applications are more frequent for these channels. In any event, UTC urges the FCC to immediately conduct random selection procedures for all pending MAS applications that are MX, some of which have been pending more than 3 years.

point usage.<sup>37</sup> There are simply too few channels available to private users in this frequency range for point-to-multipoint use.

## **VII. Technical Rules Should Be Modified to Better Protect MAS From Adjacent Band Operations**

An all too frequent complaint of MAS licensees is the interference they suffer from very high power (*i.e.*, up to 3500 watts ERP) paging operations licensed in bands adjacent to the MAS bands. At a minimum, UTC recommends that the FCC not permit additional high power operations in the 932/941 MHz bands since such operations would only exacerbate the problems faced by many MAS licensees in detecting the significantly weaker signals transmitted from their remote stations in the 928 MHz band. Allowing part or all of the 932/941 MHz band to be used for high power operations would also render these bands unsuitable for MAS operations. UTC further recommends that the FCC develop better procedures by which paging operators can be held accountable for correcting such interference to MAS systems. As noted above, MAS systems are used for maintenance and restoration of critical infrastructure services and should not be forced to tolerate interruptions or degradation of service due to commercial paging systems operating in adjacent bands and at significantly greater powers. Consideration should also be given to allowing MAS licensees to increase power of remote units in order to overcome such interference.

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<sup>37</sup> UTC would not oppose point-to-point use on an ancillary basis on channels in the 932/941 MHz band that are subject to auctioning.

### **VIII. Conclusion**

The Commission is required to allocate spectrum in the public interest. In the case of multiple address systems, the public interest remains in allocating sufficient channels for use in current and anticipated private, internal systems needed by utilities and pipelines. There has been no significant demand for subscriber-based MAS services, despite the fact that the FCC's rules have permitted such operations in currently allocated MAS spectrum.

While auctions have been successful in raising additional revenue for the federal treasury, recent history has shown that they do not expedite the initiation of service nor do they necessarily lead to the initiation of any service (e.g., IVDS). In the case of MAS, history has shown that private, internal systems are deployed promptly after licensing and those that were not were typically licensed to speculators or entities hoping to establish subscriber-based services. The 932/941 MHz channels could have been put to productive use long ago had the FCC taken the steps necessary to rank-order the applications as it had promised to do when these bands were opened for licensing.

UTC therefore urges the FCC to retain the 928/952/956 MHz MAS channels for use in private, internal systems, and that at least 25 channel pairs be allocated in the 932/941 MHz bands to meet current and projected needs of utilities, pipelines and other private, internal users.

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

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Number of 952/928 MAS Channels available\*

