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

In the Matter of:	
Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems	ET Docket No. 00-258
The Establishment of Policies and Service Rules for the Mobile-Satellite Service in the 2 GHz Band	IB Docket No. 99-81
Amendment of the U.S. Table of Frequency Allocations to Designate the 2500-2520/2670-2690 MHz Frequency Bands for the Mobile-Satellite Service	RM-9911
Petition for Rule Making of the Wireless Information Networks Forum Concerning the Unlicensed Personal Communications Service	RM-9498
Petition for Rule Making of UTStarCom, Inc., Concerning the Unlicensed Personal Communications Service	RM-10024

COMMENTS OF UTAM, INC.

UTAM, Inc. ("UTAM"), the Commission's designated frequency coordinator for the unlicensed personal communications services ("UPCS") band,[1] herewith submits its comments on the Third Notice of Proposed Rulemaking ("Third NPRM") in the above-captioned dockets. In the Third NPRM, among other things, the Commission seeks comment on "whether [the FCC]

[1] The voting membership of UTAM, Inc., currently consists of Alcatel USA, ASCOM Wireless Solutions, Avaya (formerly the Enterprise Network Group of Lucent Technologies), Cortelco, CTP Systems, ECI Telecom, Inc., IWATSU America, Motorola, Inc., NEC America, Inc., Nitsuko America, Nortel Networks Inc., Siemens Information and Communication Networks, Inc., SpectraLink Corporation and Toshiba. UTAM also has numerous associate members.

should re-designate all or a portion of the UPCS spectrum at 1910-1920 [MHz] for new fixed and mobile uses," also proposes to "[r]etain the 1920-1930 MHz band for UPCS use," and solicits comment on "whether [the FCC] should provide for additional flexibility in [the 1920-1930 MHz] band, as well as any other additional spectrum that [is] retain[ed] for UPCS use." Consistent with its prior comments in this, and related dockets, and as discussed in further detail below, UTAM strongly believes that the FCC should: (i) retain the entire 1910-1930 MHz band for UPCS and make necessary technical modifications to promote UPCS use and (ii) ensure that, in the event UPCS spectrum is reallocated for other fixed or mobile uses, UTAM and the manufacturer members of UTAM are adequately compensated for their relocation of incumbent microwave users in the 1910-1930 MHz spectrum. UTAM urges the FCC to act consistent with these proposals in adopting a further Report and Order in these dockets.

I. THE PUBLIC INTEREST SUPPORTS RETAINING THE ENTIRE 1910-1930 MHz BAND FOR UPCS DEVICE USE

UTAM has documented in this proceeding previously, as well as the interrelated 800 MHz rebanding proceeding,[2] the significant harm that would be caused to the UPCS community in the event of a reallocation of significant spectrum from the 1910-1930 MHz band. UTAM further demonstrated that the UPCS band is not lightly or inefficiently used:

- Spectrum congestion in hotspot deployment areas is already an issue for the isochronous band at 1920-1930 MHz, and the only means for relief is to adopt rule changes consistent with WINForum's cross-over petition to permit isochronous devices to use the asynchronous band.[3]

[2] Comments of UTAM, In the Matter of Improving Public Safety Communication in the 800 MHz Band, Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, WT Docket No. 02-55 (filed May 6, 2002); Comments of UTAM, In the Matter of Improving Public Safety Communication in the 800 MHz Band, Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, WT Docket No. 02-55 (filed September 23, 2002); Comments Of UTAM, Inc. on Supplemental Filing By the Consensus Parties, WT Docket No. 02-55 (filed February 10, 2002).

[3] *See* UTAM Comments at 14-15; Amendment of the Commission's Rules for Unlicensed Personal Communications Services, Petition For Rulemaking of the Wireless Information Networks Forum, RM-9498 (Jan. 8,

- ❖ Moreover, with the near completion of the relocation of incumbent microwave users from the UPCS band, the industry is poised to introduce a range of isochronous and asynchronous nomadic products that will place further spectrum demands on the limited UPCS spectrum available.[4]

- ❖ Both of these scenarios are also exacerbated by the potential for introduction of certain other classes of devices—as proposed by UTStarCom and supported by UTAM—into the asynchronous band, as discussed below.[5]

UTAM believes that the extant needs of UPCS devices, the lack of available alternatives, and the investment undertaken by industry are wholly at odds with any proposal to allocate spectrum in the 1910-1920 MHz band for any use other than UPCS. A number of companies are dedicated exclusively—or as major parts of their product lines—to the UPCS band. For all of these companies, which believe they have undertaken the effort and investment in equipment development and band clearing based upon a compact with the FCC regarding use of the 1910-1930 MHz band, the elimination, or even impairment, of the ability to market and deploy wireless UPCS products is a threat to their very existence. Wisely, therefore, the FCC has stated that it is "no longer proposing to reallocate the 1920-1930 MHz portion of the UPCS band to support AWS applications."

The Third NPRM indicates, however, that the 1910-1920 MHz portion of the UPCS band may be suitable for reallocation to AWS, and has tentatively indicated that such spectrum might be paired with the spectrum at 1990-2000 MHz. That would, in effect, create 10 x 10 MHz of spectrum paired adjacent to, and consistent with the channel separation of, the existing

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(Continued . . .)
1999) ("WINForum Petition") (proposing a minor modification to the asynchronous etiquette within the 2390-2400 MHz band).

[4] *See* UTAM Comments at 11-12.

[5] *See In the Matter of Request of UTStarcom and Drew University For Waiver of Sections 15.307; 15.311; 15.319(a),(c),(e); and 15.321 of the Commission's Rules*, DA 00-2061 (filed July 7, 2000). *See also* UTAM, Inc. Notification of *Ex Parte* Presentation in FCC Docket Nos. ET Docket No. 00-258, ET Docket No. 95-18, IB Docket No. 99-81, WT Docket No. 02-55, RM-9498, and RM-10024 (filed Aug. 8, 2002).

licensed PCS band. However, as UTAM has previously noted, the use of the 1910-1930 MHz band for unlicensed devices in the first instance was driven, in part, by the need to create an adequate separation between the licensed PCS base and mobile transmit bands. The Third NPRM notes that "it appears possible to reduce this separation by 5 to 10 [MHz] without leading to harmful interference to existing Broadband PCS systems."[6]

There is no record evidence that reduction of the transmit/receive separation by 10 MHz is feasible and, in fact, there is evidence to the contrary. Indeed, the *ex parte* filed by Nextel and cited by the Third NPRM in support of a potential 10 MHz reallocation concludes that reallocation of *1910-1915 MHz* will not cause interference to PCS systems at 1930-1990 MHz. The *ex parte* makes no conclusions regarding the impact of reallocating the 1915-1920 MHz band to AWS. On the other hand, a prior *ex parte* filed by Motorola concludes the exact opposite—that reallocation of 1915/1916-1920 MHz would "[g]enerally require >40dB of attenuation at 1930 MHz" and that such a scheme "[l]ikely requires split band (two) duplexers to achieve noise [levels] in a single radio" which may be cost or technology prohibitive. Thus, the technical record before the agency indicates that, at most, an allocation of 1910-1915 MHz is feasible without causing interference to existing licensed PCS operations.

To the extent that the agency determines that some reallocation is warranted, there are also other technical reasons—besides protection of existing licensed PCS systems—favoring limiting such reallocation to 1910-1915 MHz. As the Commission is aware, UTAM supported a modification of the UPCS rules that would permit UTStarCom to introduce certain PHS devices in the 1910-1920 MHz band. In order to protect UPCS systems at 1920-1930 MHz, the UTAM

[6] Third NPRM at ¶50 (citing letter from Regina M. Keeney, Esq., on behalf of Nextel, to Marlene H. Dortch, Secretary, Federal Communications Commission, *ex parte*, IB Docket No. 01-185, ET Docket No. 00-258 (filed Jan. 23, 2003)).

and UTStarCom consensus changes required a guardband of 2 MHz at 1918 MHz to 1920 MHz. Should the FCC move forward with a complete reallocation of 1910-1920 MHz, there is simply no means to accommodate the types of UTStarCom proposed uses consistent with protecting existing UPCS systems. If the FCC were to limit the reallocation of UPCS spectrum to 1910-1915 MHz, however, UTStarCom could still operate on a subset of the 1915-1920 MHz band while retaining a guardband between such operations and the frequencies used by UPCS devices.

In sum, UTAM continues to believe that a reallocation of the 1910-1920 MHz band for AWS is contrary to sound public policy. Should the Commission ultimately determine that some reallocation for AWS is necessary, UTAM believes the record before the agency supports at most a reallocation of 1910-1915 MHz. A limited reallocation of 5 MHz would still create a usable AWS license similar to the D, E and F Block PCS licenses; leave in place a sufficient guard band between Broadband PCS base and mobile transmit bands; afford additional needed spectrum to isochronous (1920-1930 MHz) devices; and, permit the introduction by UTStarCom of new PHS systems on a non-interference basis to UPCS devices.

II. IN THE EVENT THAT SPECTRUM IN THE UPCS BANDS IS REALLOCATED, THE FCC MUST ENSURE NEW LICENSEES FULLY AND FAIRLY COMPENSATE UTAM FOR THE RELOCATION OF INCUMBENT MICROWAVE USERS

UTAM is a non-profit cooperative industry association chartered to spread, over the manufacturer community, the costs of relocating microwave facilities in the 1910-1930 MHz bands. As the FCC has observed in the Third NPRM, "new licensees will reap the benefits of UTAM's band clearing activities." Furthermore, the Commission has concluded that it is consistent with prior precedent that UTAM "should be made whole." The proposal in the Third NPRM, therefore, is to require compensation be paid to UTAM for its activities based upon the percentage of the band that is ultimately reallocated; e.g., 25 percent if 5 MHz—or 25 percent—

of the UPCS band is reallocated. While UTAM generally concurs that such a scheme would be compensatory, there are significant implementation details that warrant further consideration. That being said, the Commission's cost-sharing model for licensed PCS services generally appears to provide an adequate model for resolving these issues.

As an initial matter, UTAM believes that the total costs that should be compensated include the *pro rata* percentage of the overall costs of UTAM, including acceleration of cost-sharing obligations currently being paid in installments. UTAM is non-profit and exists solely for the purpose of relocating microwave links. As a definitional matter, its total expenses are a perfect accounting of the "costs" of clearing microwave incumbents in the 1910-1930 MHz band. Notably, however, UTAM is also subject to future obligations, in the form of installment payments, for links moved by third parties for which UTAM owes cost-sharing. Because no future entities will qualify for installment payments, the base *pro rata* percentage of those obligations benefiting relocated spectrum should be accelerated and paid as a lump sum.

As the Third NPRM notes, there remain some microwave links that have not been moved. UTAM submits, if spectrum in the UPCS band is reallocated, the FCC should treat new licensees as it treats existing licensees adjacent to the UPCS band under the cost-sharing rules. In other words, if UTAM relocates a link that accrues to the benefit of a licensee in the reallocated block, that licensee would be responsible for the payment of an amount of the relocation costs proportionate to the number of licensees overall (including UTAM) benefiting from that relocation. If the licensee relocates a link that subsequently accrues to the benefit of UTAM's members, then UTAM would trigger a similar cost-sharing obligation. In other words, a licensee operating in a theoretical "G" Block adjacent to UPCS should be treated no differently that existing licensees in the A and C Blocks that are already adjacent to the UPCS band.

As a final matter, UTAM believes that the payment of reimbursement costs to UTAM should be a precondition to the grant of the license by the FCC, much as the payment of auction funds is a prerequisite to licensing. Moreover, given that the benefit of UTAM's efforts accrues to the entire band, allocating the costs among licensees based on POPs appears to be an effective, simple, and manageable means of cost recovery. This has the added benefit of being a knowable amount that can be included in the bidding disclosures for each license, and therefore the microwave relocation payment can be factored into a licensee's bidding.

III. CONCLUSION

UTAM continues to believe that the reallocation of UPCS spectrum is contrary to long term spectrum policy. That being said, should the Commission inadvisably determine that some reallocation is warranted, the reallocation should be limited to only 5 MHz at 1910-1915 MHz. The 1915-1920 MHz band should be retained as UPCS spectrum, and subject to the rule modifications previously proposed by UTAM. In the event of such a reallocation, the new licensees should bear the responsibility of paying an amount of UTAM's costs proportionate to the licensed service area and the percentage of the UPCS band that was reallocated. UTAM

believes that any action in this docket must be consistent with the recommendations herein to remain consistent with prior Commission policies.

Respectfully submitted,

UTAM, INC.

By: /s/ Sandy Abramson

Sandy Abramson
President
991 Route 22 - Ste. 104
Bridgewater, NJ 08807
(908) 526-3636

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