

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

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In the Matter of )  
 )  
Amendment of the Commission's ) GEN Docket No. 90-314  
Rules to Establish New Personal )  
Communications Services )

UTAM REPORT TO THE FCC

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**UTAM REPORT TO THE FCC**

UTAM, Inc. ("UTAM"), the frequency coordinator for the unlicensed personal communications service ("UPCS") band, herewith submits its ninth report on implementation of the UTAM Plan for Financing and Managing 2 GHz Microwave Relocation.<sup>1</sup> As detailed below, UTAM continues to fulfill its obligations to make significant progress in clearing the UPCS band and facilitating the deployment of UPCS devices. The continued year-over-year growth of deployed UPCS devices, the increased number of manufacturers that are entering the market and the application of the technologies in all facets of business, education

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<sup>1</sup> UTAM Plan for Financing and Managing 2 GHz Microwave Relocation, GEN Docket No. 90-314 (filed Aug. 1, 1994) [hereinafter "UTAM Plan"]. On April 19, 1995, the Commission formally approved UTAM as the UPCS frequency coordinator. As part of its responsibilities, UTAM was charged with submitting biannual progress reports to update: (a) the financial and band-clearing plans; (b) projections of future band clearing; (c) the extent of incumbent microwave relocations; (d) the extent of UPCS device deployment; and (e) any difficulties encountered in implementing the UTAM Plan. Amendment of the Commission's Rules to Establish New Personal Communications Services, 10 FCC Rcd 7955 (1995) (Fourth Memorandum Opinion and Order).

and health care, are indicative of a successful and healthy developing market. The procedures that UTAM has put in place to insure compliance with its charter continue to work well in managing the deployment of unlicensed devices and protecting incumbent microwave operations from any interference. To date, no incidents of microwave interference have been encountered.

## **I. EXECUTIVE SUMMARY**

As noted in previous reports to the Commission, UTAM continues to meet the objectives established by the Commission in bringing UPCS systems to the public. Over the course of the reporting period, the processes and procedures put in place to allow the deployment of UPCS devices have continued to work well and continue to be adhered to by manufacturers of UPCS devices.<sup>2</sup> As in the past, UTAM will continue to monitor these processes and procedures and make any refinements deemed necessary.

Since UTAM filed its last report with the Commission in January, 1999, UTAM is pleased to report that the following tasks have been accomplished:

- The UPCS market continues to grow with deployments in the first half of 1999 exceeding the same period last year by over 100%.

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<sup>2</sup> Under FCC rules, parties must execute a signed Subscriber Agreement with UTAM, receive UTAM certification and obtain FCC authorization before marketing or installing a UPCS product of device. See 47 C.F.R § 15.307.

- UTAM has tentatively reached a comprehensive cost sharing agreement with the PCIA Clearinghouse and its members that involves 160 microwave links. The agreement accelerates the UPCS clearing process by opening up a substantial number of counties and major metropolitan areas to unencumbered deployment of UPCS devices.
- Consistent with its regional clearing strategy, UTAM has basically completed clearing the Northeast region and is approximately 50% complete with the clearing of the Southeast region.
- Nationally, in the 1920 – 1930 MHz Isochronous band, UTAM has increased the number of counties available for unencumbered deployment to 2,733, or 87% of the U.S. In the 1910 – 1920 MHz asynchronous band, 2,544 counties, or 81%, of the country is available for unencumbered deployment.
- UTAM has undertaken an upgrade of its information systems to allow for Internet access.
- UTAM has continued to undertake planned annual audits of its members to insure the integrity of its UPCS product deployment reports, clearing fee payments and its Data Base Management System.

## **II. UPCS MARKET DEVELOPMENT**

With the UPCS band now in its 4<sup>th</sup> full year of availability for deployment of unlicensed devices, it has become apparent that the market for these devices is an unquestionable success. Having overcome the typical start-up issues of any new technology introduced on a wide scale, manufacturers are starting to introduce second and third iterations of products. Each year has also witnessed the entry of additional manufacturers into the market providing end users with a wider choice of products, products with enhanced features and application, and as a result of more competition, end users are also witnessing falling prices. As the

technology becomes less expensive, in addition to its continuous growth, the market is also witnessing larger scale deployments of the technology. In the early stages of the market, end users would typically provide wireless coverage within a building. More and more the norm is to provide coverage throughout multiple buildings. As in every year since the unlicensed band has been available, 1999 market growth is on a trajectory to once again show growth in triple digits. And as previously noted in earlier reports to the Commission, users, spanning literally every industry, including education and health care, have made unlicensed wireless devices a part of their everyday lives. The technology continues to prove its value by providing increased productivity, competitive advantages and convenience and has become inherently part of any new communication system. Like cordless and cellular phones, UPCS wireless devices are now becoming both commonplace and a necessity.

### **III. DEPLOYMENT ACTIVITIES**

#### **A. Deployment Procedures**

As stated in previous reports, UTAM is pleased that the procedures developed and refined to facilitate the deployment of UPCS devices continue to be effective and are being readily adhered to by manufacturers. In an ongoing effort to effectively streamline its operations and to respond to suggestions made by participating manufacturers and others, UTAM will continue to evaluate and

refine these procedures, as needed. To date, the lack of any interference incidents with microwave incumbents attests to the quality of the processes and the adherence to them by the manufacturers.

Since UTAM filed its last report with the Commission, the UTAM Database Management System (DBMS) continues to perform as designed. Members are complying with the requirements set forth in the Subscriber Agreement to update the DBMS when products are sold and installed, which allows UTAM to monitor market development, aggregate power generation and ensure compliance with pre-designated power limits set for Zone 1 counties. In addition, UTAM members also have been using the DBMS as part of the pre-sales process to determine whether a particular customer's location is in a Zone 1 or Zone 2 county.

Also, as specified in the Subscriber Agreement, UTAM, through an independent third party, continues to audit its subscriber members deployment records to ensure that UTAM's records accurately track product deployments, thereby ensuring the integrity of the DBMS. This audit is intended to ensure that the database monitoring mechanisms are operating as intended and that the proper clearing fees are paid. To date, no major discrepancies have been observed.

**B. Prior Coordination Notice ("PCN") Procedure**

As noted in earlier reports to the Commission, UTAM has classified each county in the United States based upon a two-zone classification system. Zone 1 counties are those counties distant from existing microwave operations which permit deployment of UPCS products up to a pre-determined and "pre-coordinated" power limit. In contrast, Zone 2 counties have existing microwave operations either nearby or in the county and, as a result, UPCS product deployments cannot occur within such a county until a site-specific coordination has been successfully completed. There are also 1,120 Isochronous and 1,200 Asynchronous Zone 2 counties that UTAM has classified as "non-scheduled". Although these counties qualify for a pre-coordinated Zone 1 status, their business population is less than 5,000 and they therefore have not been scheduled for conversion at this time. These counties are automatically converted by UTAM, via the PCN process, when a manufacturer files for a site specific coordination.

Through the course of the first half of 1999, UTAM, through its Prime Frequency Coordinator, Comsearch, has issued a total of 161 PCNs for Zone 1 candidate counties, bringing the total number of Zone 1 counties in the 1920 - 1930 MHz Isochronous band to 1,592, or 51% of the counties in the U.S. When the qualified Zone 2 "non-scheduled" counties are considered, 87% of the counties would qualify as Zone 1. In the 1910 - 1920 GHz Asynchronous band,

the total number of Zone 1 counties has increased from 1,202 in UTAM's last report to the Commission, to 1,345, or 43% of the counties in the U.S. When the qualified Zone 2 "non-scheduled" counties are considered 81% of the counties are available for unencumbered deployment in this band. A Zone 1 PCN notifies affected microwave incumbents that UTAM has declared a county to be a Zone 1 candidate and that the county will be "pre-coordinated" for a particular power level as determined in accordance with current TIA Bulletin 10 guidelines.

### **C. Product Deployment**

Also, as in past reporting periods, product deployment continues to grow at a very healthy pace. In the first half of 1999, product deployments will have grown over 100% from the same time period in 1998 and are expected to continue on this growth curve through the remainder of 1999, especially given the entrance of additional manufacturers into the market. Quarter-over-quarter product deployments continue to demonstrate a healthy growth curve in a developing market. As required by its charter, UTAM will continue to coordinate the deployment of these unlicensed devices and to collect the associated clearing fees. As more fully detailed in the UTAM Plan filed with the Commission, UTAM will use these fees to finance the relocation of microwave incumbents from the spectrum allocated to UPCS.

#### **IV. RELOCATION ACTIVITIES**

The continued successful growth of the UPCS market ultimately depends on the full clearing of the UPCS band. If one looks at the growth of the market over time, there is a strong correlation with the availability of Zone 1 counties. While the complete clearing will still take a few more years, UTAM has taken steps that will both facilitate ease of deployment and accelerate the clearing process. As mentioned in earlier reports, UTAM has undertaken a regional clearing strategy to facilitate the conversion of the remaining Zone 2 counties. By taking this approach, UTAM will open up large contiguous areas of the country for unencumbered product deployment. UTAM's initial focus was in the Northeast region which, with the exception of a few small, sparsely populated counties, is now clear. UTAM's most recent focus has been on the Southeast region, which to date is now about 55% clear. It is expected that the Southeast region will be cleared in the first half of 2000 at which time UTAM will begin on the Midwest region. In the course of this effort, UTAM has submitted Prior Coordination Notices to the Microwave Clearinghouses consistent with its obligation under the FCC Microwave Relocation Cost Sharing rules. In doing so, it has initiated obligations consistent with the rules.

In an effort to accelerate the clearing process, UTAM has tentatively entered into a comprehensive cost sharing agreement with the PCIA Clearinghouse and its members. Under the agreement, UTAM will share the

costs of 160 relocated microwave links with the PCS carriers responsible for their relocation and as a result, will be able to reclassify over 200 counties Zone 2 counties to Zone 1 status, many of which contain major metropolitan areas. It is anticipated that this accelerated clearing effort will contribute to the continued growth of the UPCS market, and in turn, generate accelerated clearing fees that will be applied, in part, to the costs incurred under the cost sharing agreement and increase the potential for opening up the UPCS band to nomadic devices. UTAM and the PCIA Clearinghouse expect to complete on the agreement in the weeks ahead.

## **V. OPERATIONAL, ORGANIZATIONAL AND FINANCIAL STATUS**

### **A. Operational Status**

UTAM continues to successfully use the operational procedures that it put in place to oversee the deployment of UPCS devices and coordinate deployment with incumbent microwave systems. UTAM will continue to evaluate these processes and refine them as necessary.

As a result of its ongoing evaluation of these procedures, plus feedback from its members, UTAM is in the process of upgrading its data base and information systems to make them accessible via the Internet and to insure that the systems are Y2K compliant.

**B. Membership and Staffing**

The voting membership currently consists of Alcatel USA, Comdial, Cortelco, CTP Systems, Executone Information Systems, Ericsson, Inc., Harris Digital Telephone Systems, Lucent Technologies, Motorola, Inc., NEC America, Inc., Nitsuko America, Nortel Networks, Inc., Siemens Business Communications Systems, Inc., SpectraLink Corporation, ECI Telecom, Inc. and Toshiba. In addition, UTAM also has numerous associate members.<sup>3</sup> Given the ongoing number of inquiries for requirements to operate in the UPCS band, combined with the continued clearing of the UPCS band, UTAM is confident that additional manufacturers and distributors will become voting members in the second half of 1999.

UTAM has also had a change in its Board of Trustees Executive Committee. Mr. Peter Cassidy, Nortel Networks, has been installed as the new Treasurer.

UTAM's subcommittee structure continues to provide the Board of Trustees with additional operational support. Subcommittee membership is open to any interested party, and several member and non-member companies continue to participate actively in this regard. A list of the current UTAM subcommittees is provided in Appendix B.

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<sup>3</sup> A complete list of UTAM Board of Trustees and Associate Members is attached as Appendix A.

### **C. Funding**

UTAM has continued to collect clearing fees from the deployment of UPCS products. The actual and forecasted growth in clearing fees resulting from increased deployments indicates that these fees, combined with UTAM's current assets, will keep UTAM in a sound financial position into the foreseeable future.

## **VI. OUTREACH ACTIVITIES**

UTAM has continued its efforts to maintain contacts with other PCS-related industry groups in order to remain current on industry developments. UTAM continues to discuss UTAM's participation in the FCC's cost sharing process with representatives of the PCIA and ITA clearinghouses. As mentioned earlier, UTAM has entered into a cost sharing agreement with the PCIA Clearinghouse and its members in an attempt to accelerate its clearing initiatives. It has also approached the ITA Clearinghouse with the same intent.

Through its members, UTAM also participates in other industry-wide seminars and trade shows to increase the awareness of the market for UPCS devices. In addition, UTAM continues to answer inquiries regarding its objectives and processes and provides information to interested parties as necessary.

**VII. CONCLUSION**

UTAM is once again pleased to report that the framework that has been established for the deployment of unlicensed devices continues to work successfully. The continued growth of UPCS sales, the continued adherence by manufacturers to UTAM's operational processes and UTAM's continued efforts to prevent harmful interference to microwave incumbents indicate that UTAM is maintaining a proper course for fulfilling its overall charter. UTAM will continue to monitor and refine its operations to meet the dynamics of the UPCS market and looks forward to the challenges that lie ahead.

Respectfully Submitted,

UTAM, INC.

By: 

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President

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July 1, 1999

## APPENDIX A

### UTAM BOARD OF TRUSTEES AND ASSOCIATE MEMBERS

#### VOTING MEMBERS

Alcatel USA – Ms. Joyce Cruickshank  
Comdial – Mr. Randy Berger  
Cortelco – Mr. John Harbor  
CTP Systems – Mr. Rony Greenberg \*\*  
Executone Information Systems – Mr. Ken Ulrich  
Ericsson, Inc. – Mr. Bob Ashlock \*\*  
Harris Digital Telephone Systems – Mr. Dennis Fowler  
Lucent Technologies, Inc. – Ms. Sandy Abramson (*President*) \*\*  
Motorola, Inc. – Mr. Wayne Leland \*\*  
Nitsuko America – Mr. Paul Schaeffer  
NEC America Inc.– Mr. Paul Weismantel (*Vice-President*) \*\*  
Nortel Networks, Inc. – Mr. Peter Cassidy (*Treasurer*) \*\*  
Siemens Business Communications Systems Inc. – Mr. Peter Kozdon \*\*  
SpectraLink Corporation – Mr. Ben Guderian (*Secretary*) \*\*  
ECI Telecom, Inc. – Mr. John Dabnor \*\*  
Toshiba – Mr. Paul Keith

\*\* Member of the Board of Trustees

#### UTAM ASSOCIATE MEMBERS

Bell South Wireless, Inc.	JRC Canada, Inc.
Communications Certification Laboratory	Matsushita
Comsearch	NTT America
Freepoint Telecom	P-Com Network Services
Harris Corporation	Phillips Business Communications
Industrial Telecommunications Association	Redcom Laboratories

## APPENDIX B

### UTAM SUBCOMMITTEES

The following identifies the UTAM subcommittees and the issues over which each has oversight responsibilities. Parties interested in participating in any of the subcommittees should contact Mike Stima at (908) 526-3636.

**Certification Subcommittee.** The Certification Subcommittee is responsible for addressing issues relating to UTAM's Certification Procedures and Disablement and Location Verification Process ("LVP").

**Database Subcommittee.** The Database Subcommittee is responsible for the continued operation and enhancement of UTAM's database management system.

**Operations Subcommittee.** The Operations Subcommittee is charged with developing and executing UTAM's policies and operational procedures for microwave relocation. It also works with the Prime Frequency Coordinator on coordination activities and the development and implementation of UPCS procedures. Current tasks include considering cost sharing issues and working with the Market Subcommittee to recommend microwave link relocation priorities.

**Market Subcommittee.** The Market Subcommittee is responsible for modifications to the clearing fee collection mechanism, the prioritization of microwave links for the relocation of microwave links, and UTAM's outreach activities. It also is the forum for handling deployment-related concerns and for coordinating UTAM publicizing activities.

**Nomadic Device Evaluation Subcommittee.** The Nomadic Device Evaluation Subcommittee is responsible for reviewing issues relating to nomadic device deployment and determining the action required to facilitate early deployment of such devices.