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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

GEN Docket No. 90-314

In the Matter of )  
 )  
Amendment of the Commission's )  
Rules to Establish New Personal )  
Communications Services )

### UTAM REPORT TO THE FCC

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List A B C D E

**TABLE OF CONTENTS**

	<u>Page</u>
I. EXECUTIVE SUMMARY.....	2
II. UPCS MARKET DEVELOPMENT .....	3
III. DEPLOYMENT ACTIVITIES .....	4
A. Deployment Procedures .....	4
B. Prior Coordination Notice (“PCN”) Procedure .....	5
C. Product Deployment.....	6
IV. RELOCATION ACTIVITIES .....	7
V. OPERATIONAL, ORGANIZATIONAL AND FINANCIAL STATUS .....	8
A. Operational Status.....	8
B. Membership and Staffing.....	8
C. Funding .....	9
VI. OUTREACH ACTIVITIES.....	9
VII. CONCLUSION .....	10



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 July, 1999, UTAM is pleased to report that the following tasks have been accomplished:

- UTAM has reached a comprehensive cost sharing agreement with the PCIA Clearinghouse<sup>3</sup> and its members that involves 174 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 cleared the Northeast region, with the exception of a few remote counties, and is approximately 60% 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 2,756, or

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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.

<sup>3</sup> The PCIA Clearinghouse is one of two designated entities established by the FCC to track the relocation of microwave links that operate on the Licensed and Unlicensed PCS frequencies, to notify affected entities of such relocations, and to facilitate the sharing of microwave link relocation costs by such affected entities.

88% of the U.S. In the 1910 – 1920 MHz asynchronous band, 2,602 counties, or 83%, of the country is available for unencumbered deployment.

- UTAM is in the process of upgrading the ease of use of its information systems by allowing 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.
- Through its mutual efforts, UTAM working with the Industry Advisory Group (IAG) of Canada, has determined that the US and Canada have been sufficiently cleared of microwave links in the UPCS band along the border that cross-boarder coordination, as specified under the US - Canada cross-border agreement, is no longer required.

## **II. UPCS MARKET DEVELOPMENT**

With the UPCS band now in its 5<sup>th</sup> full year of availability for deployment of unlicensed devices, the market for products that operate in this band continues to illustrate all the signs of success. Deployment of enterprise based wireless systems has become more and more prevalent. Literally every industry, including education and health care, have made unlicensed wireless communication a part of their everyday lives. The productivity and customer service that is provided by these system have made them a competitive necessity. Like cordless and cellular phones, UPCS wireless devices are becoming commonplace and have become an inherent component of many new installations of enterprise based communications solutions.

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. The technology also continues to advance as manufacturers begin introducing second and third generation products.

As the technology becomes less expensive, in addition to its growth in the number of systems deployed, 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 will once again show significant growth, indicative of the success this market segment is experiencing.

### **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 1,112 Isochronous and 1,212 Asynchronous Zone 2 counties that UTAM has classified as "non-scheduled". These counties qualify for a pre-coordinated Zone 1 status, however, their business population is less than 5,000 and therefore have not been scheduled for conversion at this time. These counties are automatically converted by UTAM, via the PCN process, when any subscriber files for a site specific coordination in that county.

Through the course of 1999, UTAM, through its Prime Frequency Coordinator, Comsearch, has issued a total of 231 PCNs for Zone 1 candidate counties, bringing the total number of Zone 1 counties in the 1920 - 1930 MHz Isochronous band to 1,644, or 53% of the counties in the U.S. When the qualified Zone 2 "non-scheduled" counties are considered, 88% 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 1,390, or 44% of the counties in the U.S. When the qualified Zone 2 "non-scheduled" counties are considered, 83% 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 healthy pace. Quarter-over-quarter product deployments continue to demonstrate a healthy growth curve in a developing market. As chartered, 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 over 60% clear. It is expected that the Southeast region will be cleared in 2000 at which time UTAM will begin to focus 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 entered into a comprehensive cost sharing agreement with the PCIA Clearinghouse and its members. Under the agreement, UTAM will share the costs of 174 relocated microwave links with the PCS carriers responsible for their relocation and as a result, UTAM has reclassified over 200 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. While the Cost Sharing Rules provide for independent agreements outside of the rules, UTAM and the PCIA Clearinghouse, in an effort to insure awareness of the agreement, reviewed it with the Commission's Wireless Bureau on August 3, 1999.

## **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 Information and Communication Networks, Inc., SpectraLink Corporation, ECI Telecom, Inc and Toshiba. In addition, UTAM also has

numerous associate members.<sup>4</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 2000.

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.

### **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

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<sup>4</sup> A complete list of UTAM Board of Trustees and Associate Members is attached as Appendix A.

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.

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January 3, 2000

## 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. Mark Giugni \*\*  
Executone Information Systems – Mr. Ken Ulrich  
Ericsson, Inc. – Mr. Chad West \*\*  
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 Information and Communication Networks, 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
Freemont Telecom	P-Com Network Services
Harris Corporation	Phillips Business Communications
Industrial Telecommunications Association	Redcom Laboratories