

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

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

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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January 1, 1998

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deployment of devices while protecting incumbent microwave licensees' operations from harmful interference.

## 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 are adhered to by manufacturers of UPCS devices.<sup>2</sup> UTAM will continue to monitor these processes and procedures and make any refinements deemed necessary.

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

- ▶ Deployment of unlicensed product continues to increase, showing nearly a 200% growth in 1997 over 1996.
- ▶ Over the course of 1997, UTAM has accelerated the Zone 1 county conversion process, completing this phase of the UTAM plan 6 months ahead of schedule.
- ▶ UTAM has submitted Prior Coordination Notices to the Microwave Clearinghouses consistent with its obligation under the FCC Microwave Relocation Cost Sharing rules.
- ▶ UTAM has begun the process of converting Zone 2 counties, which have already been cleared by others, to Zone 1, thereby initiating cost sharing obligations consistent with the FCC Microwave Relocation Cost Sharing Rules.
- ▶ Additional members have begun deploying product.

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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.

- ▶ As the volume of UPCS products continues to grow the benefits that these products offer is being realized by an ever increasing number of applications across a broader number of industries.
- ▶ UTAM has completed audits of its members UPCS product deployment records to insure the integrity of its UPCS product deployment reports, clearing fee payments and its Data Base Management System.

## II. UPCS APPLICATIONS AND PUBLIC BENEFITS.

With the continued strong growth of UPCS product deployments, the breadth of industries realizing the benefits of unlicensed products continues to expand. It has become very common to see a doctor or nurse carrying around a UPCS phone while they perform their rounds, or, to witness a retail sales person responding to customer inquiries from the store floor. Applications abound throughout literally every industry and an increasing number of users rely more extensively on UPCS products.

Representative examples of some current individual applications include:

- ▶ A New Jersey elementary school supervises bus arrivals and departures using UPCS phones. It allows the administrators to be accessible while outside, have access to a phone in the event of an emergency and they let the children call home for those forgotten things as they get off the bus.
- ▶ A California hospital hands patients in the recovery room a UPCS mobile phone to call loved ones to let them know things are fine.
- ▶ In Illinois, a university provides its roaming security guards UPCS phones to give them access to other phones on campus, 911 services, local police and security headquarters.
- ▶ A national retailer provides its sales clerks and floor managers UPCS phones to answer customer questions from the sales floor, order inventory, call security, or check their voice mail.

- ▶ A Nebraska manufacturing company gives its maintenance crew UPCS phones to help diagnose down time repairs and order parts, minimizing production shut down.
- ▶ A major Texas plant nursery provides its fork lift drivers, warehouse personnel and sales staff with UPCS phones to coordinate and accelerate the delivery of merchandise.
- ▶ A Florida resort provides its guests with UPCS phones to so they can keep in touch while on the expansive property.

As evidenced by these and other applications, the public benefits anticipated with the allocation of unlicensed spectrum are being realized. Such benefits include making new applications cost effective since unlicensed spectrum does not require any air time charges, and encouraging the development of new technologies and applications. The UPCS allocation has, simply stated, resulted in new applications that would not have developed otherwise. In addition, these applications have encouraged economic growth and increased job opportunities.

### **III. DEPLOYMENT ACTIVITIES**

UTAM once again is pleased to report 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.

#### **A. Coordinatable Equipment Certification**

UTAM has fully implemented the certification procedures necessary to ensure that UPCS equipment will comply with the FCC's mandated disablement requirements.

By requiring that installed UPCS equipment remain in its pre-coordinated location or cease operation, the Location Verification Process and Disablement Test Suite ("LVP") ensures that equipment deployed prior to full band clearing will not cause harmful interference to microwave incumbents.

Under UTAM's contract with Communications Certification Laboratory ("CCL"), an independent laboratory specializing in certification, manufacturers' UPCS equipment is tested for compliance with all applicable LVP requirements. In addition to those manufacturers currently deploying UPCS products, additional manufacturers are undergoing this certification process, indicating that a growing number of manufacturers intend to deploy products in the UPCS band.

#### **B. UPCS and Microwave Database Management System**

Since UTAM filed its last report with the Commission, the UTAM Database Management System ("DBMS") continues to perform as designed. In addition, recently completed modifications to the DBMS have improved the overall management efficiency and ease of use. 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 have also 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.

UTAM has recently completed an annual audit of its subscriber member's 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 data base monitoring mechanisms are operating as intended. Additional audits will be conducted on an annual basis.

### **C. Prior Coordination Notice ("PCN") Procedure**

As noted in earlier reports to the Commission, UTAM has completed the classification of counties 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 their boundaries until a site-specific coordination has been successfully completed.

Through the course of 1997, and particularly this current reporting period, UTAM, through its Prime Frequency Coordinator, Comsearch, has accelerated the issuance of PCNs in order to increase the number of counties for "pre-coordinated" deployment. Comsearch has issued a total of 500 PCNs for Zone 1 candidate counties during the most recent reporting period, bringing the total number of Zone 1 PCNs issued to 1,310 Zone 1 counties in the 1920 - 1930 GHz Isochronous band and 1,105 counties in the 1910 - 1920 GHz Asynchronous 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. Through this acceleration program, UTAM has

completed this phase of its clearing plan having now converted 100% of its "pre-coordinated" counties to Zone 1 six months ahead of schedule.

#### **D. Product Deployment**

Also, as in past reporting periods, product deployment continues to grow at a healthy pace. In 1997, product deployments will have grown nearly 200% from 1996 levels. 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 deployment of UPCS products ultimately depends on the relocation of existing microwave incumbents. Now that the initial phase of converting "pre-coordinated" counties is complete, UTAM has begun the next phase of its clearing plan which is to clear links and trigger cost sharing obligations through the conversion of remaining Zone 2 counties. UTAM has undertaken a study in various regions of the country to determine which microwave links have already been relocated by PCS carriers and incumbents and which microwave links are still in operation. UTAM's focus will initially be in the Northeast region and will be followed by the

Southeastern and Midwest regions of the country. This regional approach will allow UTAM to focus its resources on a select number of links to be relocated, rather than trying to address the entire U.S. at one time. It will also open up large geographic areas of the U.S. for manufacturers to deploy products readily without the need for frequency coordination, simplifying the sales and implementation process. As part 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. It has also started the process of converting Zone 2 counties that have been cleared by others, to Zone 1 counties. In doing so, it has initiated obligations consistent with the FCC's Microwave Relocation Cost Sharing rules.

## **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.

### **B. Membership and Staffing**

The voting membership consists of Comdial, Ericsson, Inc., Harris Digital Telephone Systems, Lucent Technologies, Motorola, Inc., NEC America, Nortel, Omnipoint Corporation, Siemens Business Communications Systems, Inc., SpectraLink Corporation and Tadiran Electronic Industries, Inc. In addition, UTAM also has

numerous associate members.<sup>3</sup> Given the number of inquiries for requirements to operate in the UPCS band, UTAM is confident that additional manufacturers and distributors will become voting members with the increased levels of UPCS product deployment.

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.

### **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. Through its members, UTAM also participates in other industry-wide seminars and trade shows to increase the awareness of the market

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

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 1, 1998

## APPENDIX A

### UTAM BOARD OF TRUSTEES AND ASSOCIATE MEMBERS

#### VOTING MEMBERS

Ericsson, Inc.- Guy Campbell \*\*  
Harris Digital Telephone Systems - David Hochman  
Lucent Technologies, Inc. - Sandy Abramson (*President*) \*\*  
Motorola, Inc. - Robert Hayes \*\*  
NEC America - Paul Weismantel (*Vice-President*) \*\*  
Northern Telecom - Ron Cross (*Treasurer*) \*\*  
Omnipoint Corporation - Anna Miller \*\*  
Siemens Business Communications Systems Inc. - Peter Kozdon \*\*  
SpectraLink Corporation - Ben Guderian (*Secretary*) \*\*  
Tadiran Telecommunications Inc. - Yaron Shaul\*\*  
Comdial - Randy Berger

\*\* Member of the Board of Trustees

#### UTAM ASSOCIATE MEMBERS (1996 and 1997)

Alcatel Network Systems	American Association of Railroads
Bell South Personal Communications	Columbia Spectrum Management
Communications Certification Laboratory	CTP Systems
Comsearch	Digital Microwave Corporation
Harris Corporation	Nitsuko America Corp.
Industrial Telecommunications Association	Intel
Iwatsu America, Inc.	Mitel Corporation
Nokia Mobil Phones	Novatel
NTT America	Pacific Telecom
Panasonic	Path Tel, Inc.
Personal Technology Services	Radio Dynamics Corp.
Redcom Laboratories	Rockwell International
Southwestern Bell	SPC Electronics
Sprint	Tadiran Electronics
Tenneco Energy	U.S. West
UTC	

## 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.