

**ORIGINAL**

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

**RECEIVED**

**JUL 1 1996**

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

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

DOCKET FILE COPY ORIGINAL

**UTAM REPORT TO THE FCC**

Sandy Abramson  
President  
UTAM, Inc.  
1155 Connecticut Ave., N.W.  
Suite 401  
Washington, D.C. 20036  
(202) 429-6565

July 1, 1996

No. of Copies rec'd  
DATE

024  
OET

## TABLE OF CONTENTS

	<u>Page</u>
I. EXECUTIVE SUMMARY . . . . .	2
II. DEPLOYMENT ACTIVITIES . . . . .	3
A. Subscriber Agreement . . . . .	3
B. Coordinatable Equipment Certification . . . . .	4
C. UPCS and Microwave Database Development . . . . .	4
D. Prior Coordination Notice ("PCN") Procedure . . . . .	5
E. Policy and Procedures Manual . . . . .	6
F. Product Deployment . . . . .	6
G. Nomadic Device Deployment . . . . .	6
III. RELOCATION ACTIVITIES . . . . .	7
A. Clearing Priorities . . . . .	7
B. Rulemaking Regarding Cost Sharing . . . . .	8
IV. OPERATIONAL, ORGANIZATIONAL AND FINANCIAL STATUS . . . . .	9
A. Operational Status . . . . .	9
B. Membership and Staffing . . . . .	9
C. Funding . . . . .	10
D. Tax Exemption . . . . .	11
V. OUTREACH ACTIVITIES . . . . .	11
VI. CONCLUSION . . . . .	11

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

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**

UTAM, Inc. ("UTAM"), the frequency coordinator for unlicensed personal communications service ("UPCS"), herewith submits its third report on implementation of the UTAM Plan for Financing and Managing 2 GHz Microwave Relocation.<sup>1</sup> As detailed below, UTAM has continued to fulfill its obligations and has made significant progress in facilitating the deployment of UPCS devices. UTAM is pleased to report that the successful deployment of UPCS products is continuing and that additional manufacturers have completed the steps necessary to begin product deployment. UTAM is further encouraged that experience with its procedures for deploying UPCS

---

<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). UTAM submitted its first report on July 3, 1995 and its second report on January 11, 1996.

products developed over the past year has demonstrated their effectiveness in overseeing the deployment of devices while protecting incumbent microwave licensees' operations from interference.

## **I. EXECUTIVE SUMMARY**

UTAM has continued to meet the objectives established by the Commission in bringing UPCS systems to the public. As explained in its second report to the Commission, filed January 11, 1996, UTAM has completed the formulation of the processes and procedures necessary to allow manufacturers<sup>2</sup> to deploy UPCS devices and coordinate deployment with incumbent microwave operations. During the latest reporting period, these processes and procedures have been successfully used by manufacturers to sell UPCS products and at the same time UTAM has continued to refine and improve its procedures.

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

- Additional manufacturers have signed Subscriber Agreements with UTAM.
- UTAM has certified numerous unlicensed PCS devices and systems in accordance with UTAM's Disablement Test Suite and Location Verification Process.

---

<sup>2</sup> The term "manufacturer" is used herein to represent any individual, partnership, corporation or other entity that manufactures, sells or distributes UPCS products or systems.

- **UTAM has issued 240 Zone 1 Prior Coordination Notices ("PCNs") within the previous six months, thereby opening additional areas to UPCS deployment.**
- **The UTAM Database Management System is operational and has been modified to permit automatic upload of deployment information.**
- **Product deployment has continued and is growing at an increased rate.**

## **II. DEPLOYMENT ACTIVITIES**

**UTAM is pleased to report that the procedures developed to facilitate the deployment of UPCS devices have been successfully implemented and permit the continued sale of unlicensed systems to the public. In an ongoing effort to effectively streamline its operations and to respond to suggestions made by participating manufacturers and others, UTAM is currently evaluating and refining certain of those procedures, as needed.**

### **A. Subscriber Agreement**

**All manufacturers intending to deploy UPCS products must sign a Subscriber Agreement with UTAM agreeing to comply with the Commission's rules and UTAM's procedures regarding the sale of UPCS devices and systems. Since UTAM filed its second report with the Commission, several new manufacturers have signed Subscriber Agreements with UTAM, indicating that interest in sales of UPCS products remains strong.**

## **B. Coordinatable Equipment Certification**

UTAM has fully implemented the certification procedures necessary to establish 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. To date, several manufacturers have successfully completed the UTAM certification process.

## **C. UPCS and Microwave Database Development**

The UTAM Database Management System ("DBMS") is operational and performing as designed. UTAM's DBMS was developed to organize the significant amount of information involved in UPCS product deployment and provides UTAM staff with an important tool to monitor market and interference developments. In addition, UTAM members are permitted limited access to the DBMS to review data relating to their own deployments and to obtain information regarding the availability of a particular location for UPCS product sales.

UTAM also continues to review the performance of the DBMS and to upgrade database capabilities as required. For example, UTAM recently modified the DBMS to permit both manual and automatic data entry by deploying manufacturers through a batch-file upload capability. This feature not only makes the DBMS easier to use, but also provides additional safeguards to guarantee the integrity of deployment data.

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

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.

UTAM is currently using the PCN procedures it developed based upon the most recent version of TIA Bulletin 10 and the National Spectrum Managers Association ("NSMA") guidelines. UTAM has retained Comsearch as its Prime Frequency Coordinator ("PFC") to issue all Zone 1 PCNs and to oversee the results of site-specific Zone 2 coordinations. Comsearch issued a total of 240 PCNs for Zone 1 candidate counties during the most recent reporting period, bringing the total number of Zone 1 PCNs issued to 368. A Zone 1 PCN notifies appropriate 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. UTAM plans to issue an additional 240 PCNs in Zone 1 candidate counties during the remainder of 1996 and is continuing to identify additional Zone 1 candidate counties to be coordinated in 1997.

**E. Policy and Procedures Manual**

The UTAM Policies and Procedures Manual ("Manual") has been completed and distributed. Designed to serve as a readily accessible reference for those entities who are unfamiliar with UTAM, the Manual provides an overview of UTAM's procedures and fully describes the technical requirements that must be satisfied in order to deploy UPCS equipment.

**F. Product Deployment**

UTAM continues to coordinate the deployment of unlicensed devices and to collect the associated clearing fees. As more fully detailed in UTAM's Plan filed with the Commission, UTAM will use these fees to finance the relocation of microwave incumbents from the spectrum allocated to UPCS.

**G. Nomadic Device Deployment**

The FCC has mandated that UTAM develop a spectrum clearing plan that will facilitate the rapid deployment of nomadic devices. To this end, UTAM recently has

begun to study the technical feasibility of deploying such devices prior to full band clearing. UTAM also has allocated funds to complete a technical study of nomadic deployment and has created a subcommittee to draft a proposal for the Board of Trustees. The subcommittee is currently investigating several options suggested by Board member companies and will present a recommended strategy to the Board.

### **III. RELOCATION ACTIVITIES**

The successful deployment of UPCS products ultimately depends on the relocation of existing microwave incumbents. In order to effectively facilitate such relocation, UTAM has identified the incumbents that currently occupy the unlicensed band and is continuing to refine its clearing priorities as needed. In addition, UTAM has held exploratory discussions with microwave incumbents regarding relocation of their facilities. UTAM is hopeful that the Commission's recently adopted rules regarding cost sharing will facilitate further discussions with incumbents and encourage the efficient transition of their operations to comparable facilities.

#### **A. Clearing Priorities**

UTAM remains committed to relocating microwave incumbents currently operating in the unlicensed PCS band in accordance with the priorities set forth in its Plan and in previously filed reports. UTAM has taken several important steps toward

these relocation efforts, although it remains committed to begin relocation of a particular link only at such time as it has available all funds necessary to complete relocation of that link.

UTAM has met on several occasions with microwave incumbents and PCS licensees to discuss the opportunity to relocate the incumbent's existing microwave operations. These discussions provided valuable insight into the relocation requirements of microwave incumbents and the unique needs of UTAM. In order to facilitate the band clearing process, UTAM will continue to work with microwave incumbents and PCS licensees involved in the relocation of microwave operations in the 2 GHz band.

**B. Rulemaking Regarding Cost Sharing**

UTAM filed comments and reply comments in response to the Commission's Notice of Proposed Rulemaking regarding cost sharing and microwave relocation.<sup>3</sup> In its comments, UTAM largely supported the Commission's proposals, emphasizing the importance of giving UTAM the ability to control when it incurs cost sharing obligations and flexibility with regard to cost sharing payment terms.

---

<sup>3</sup>Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation, 11 FCC Rcd 1923 (1995) (Notice of Proposed Rule Making).

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

##### **A. Operational Status**

As noted above, UTAM is currently using the operational procedures that it put in place to oversee the deployment of UPCS devices and coordinate deployment with incumbent microwave system. UTAM will continue to evaluate these processes and refine them as necessary. UTAM also recently held a meeting open to all interested parties at which it explained its processes and reiterated that UTAM is "open for business."

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

UTAM currently has eleven voting members and numerous associate members. Voting members include: Ericsson, Inc.; Harris Digital Telephone Systems; Lucent Technologies; Motorola, Inc.; NEC America; Northern Telecom; Omnipoint Corporation; PCSI; Siemens Rolm Communications, Inc.; Sony Corporation of America; and SpectraLink Corporation.<sup>4</sup> UTAM is confident that additional manufacturers and distributors will become voting members with the increased levels of UPCS product deployment.

---

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

A Managing Director and consultant are responsible for the daily operations of UTAM. In addition, as described above, UTAM has contracted with outside vendors to provide frequency coordination services and equipment certification oversight in order to eliminate the need for maintaining numerous internal staff.

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 nonmember companies continue to participate actively in this regard. A list of the current UTAM subcommittees is provided in Appendix B.

### **C. Funding**

UTAM has begun collecting clearing fees from the deployment of UPCS products. Furthermore, voting member companies have provided sufficient advance funding commitments to sustain operations for the current year. UTAM has begun planning for its 1997 annual operating budget and is examining its short-term business plan by refining its product deployment forecasts. Because UTAM expects to rely on these clearing fees to meet its future operational and band-clearing expenses, refining these forecasts is an important step to ensure that UTAM can accomplish its goals in a manner and timeframe consistent with projected revenues.

**D. Tax Exemption**

As stated in its second report to the Commission, UTAM was granted Federal tax-exempt status under the Internal Revenue Code in 1995. Additionally, the District of Columbia Department of Finance and Revenue has recently granted UTAM tax-exempt status from income taxes in D.C.

**V. OUTREACH ACTIVITIES**

UTAM has continued its efforts to maintain contacts with other PCS-related industry groups in order to remain current on industry developments. Participating through its members in other industry-wide seminars and trade shows, UTAM has increased awareness of the market for UPCS devices and has updated other entities on UTAM's efforts to manage the relocation of incumbents from the spectrum band allocated for UPCS. As noted above, UTAM hosted an open industry meeting in March to explain its processes and to address any questions regarding its role as frequency coordinator. UTAM will likely hold additional open meetings as new developments arise and will continue to participate in relevant industry meetings.

**VI. CONCLUSION**

UTAM is pleased to report that it has completed establishment of the framework necessary to support deployment of unlicensed devices. The increasing sales of UPCS

products to the public demonstrates that UTAM is fully operational. Consistent with its ongoing efforts to further refine existing processes to better meet dynamic market requirements, UTAM looks forward to the additional challenges associated with clearing the unlicensed PCS spectrum band.

Respectfully Submitted,

UTAM, INC.

By: *Sandy Abramson*  
Sandy Abramson  
President  
1155 Connecticut Avenue, N.W.  
Washington, D.C. 20036  
(202) 429-6565

July 1, 1996

## **APPENDIX A**

## APPENDIX A

### UTAM BOARD OF TRUSTEES AND ASSOCIATE MEMBERS

#### UTAM BOARD OF TRUSTEES<sup>1</sup>

Sandy Abramson -- Lucent Technologies, Inc. (President)  
Ben Guderian -- SpectraLink Corporation (Secretary)  
Ron Cross -- Northern Telecom (Treasurer)  
Bob Ashlock -- Ericsson Inc.  
Dan Foley -- Harris Digital Telephone Systems  
Robert Hayes -- Motorola, Inc.  
Paul Weismantel -- NEC America  
Anna Miller -- Omnipoint Corporation  
Steve Sivitz -- PCSI  
Andy Balaschak -- Siemens Rolm Communications Inc.  
Andrew Zidel -- Sony Corporation of America

#### UTAM ASSOCIATE MEMBERS (1995 and 1996)

Alcatel Network Systems  
American PCSLP  
Andrew Corporation  
Association of American Railroads  
BellSouth Wireless Inc.  
California Microwave Telecom  
Columbia Spectrum Management  
Communications Certification Laboratory  
CTP Systems  
Digital Microwave Corporation  
Harris Corporation  
Hewlett-Packard Company  
Hitachi Telecom  
Iwatsu America, Inc.  
MCC Panasonic  
Mitel Corporation  
Moffett, Larson & Johnson, Inc.  
Nokia Mobil Phones  
Pacific Telecom  
PathNet, Inc.  
PCIA/Naber

---

<sup>1</sup> Although the position of Vice President is currently vacant, the Board will be conducting elections to fill this position.

Plantronics  
PTI Communications  
Rockwell International  
Sprint  
Southwestern Bell  
Tadiran Electronic Industries, Inc.  
U S West Communications  
UTC

## **APPENDIX B**

## 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 Deborah Aubrey Brimmer at (202) 429-6565.

**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.