

90-314

RECEIVED

APR 22 1994

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

DOCKET FILE COPY ORIGINAL

*Presentation to the
PCS Task Force:
A Unified Vision
for User PCS*

No. of Copies rec'd
List ABCDE

2 copies



A Unified Vision for User PCS

RECEIVED

APR 22 1994

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

- **Current UPCS Allocation is Appropriate for Audio, Video and Data Services**
- **WINForum and Unlicensed Equipment Manufacturers have demonstrated the need for 40 MHz of Spectrum**
- **The *Unlicensed Wire-less On-Ramps* for the Information Superhighway Must be Both Isochronous and Asynchronous**
- **The WINForum Conclusions are Correct**



A Unified Vision for User PCS

- **Current UPCS Allocation is Appropriate for Audio, Video and Data Services**
- **WINForum and Unlicensed Equipment Manufacturers have demonstrated the need for 40 MHz of Spectrum**
- **The *Unlicensed Wire-less On-Ramps* for the Information Superhighway Must be Both Isochronous and Asynchronous**
- **The WINForum Conclusions are Correct**

The UPCS Spectrum Allocation

- **Critical to Meet Consumer Needs**
- **Required to Ensure Economic Feasibility**
- **Equal Division of "Sweet Spot" Critical to Spectrum Opportunities and Relocation Funding**
- **Expedited Processes for Spectrum Clearing Needed**

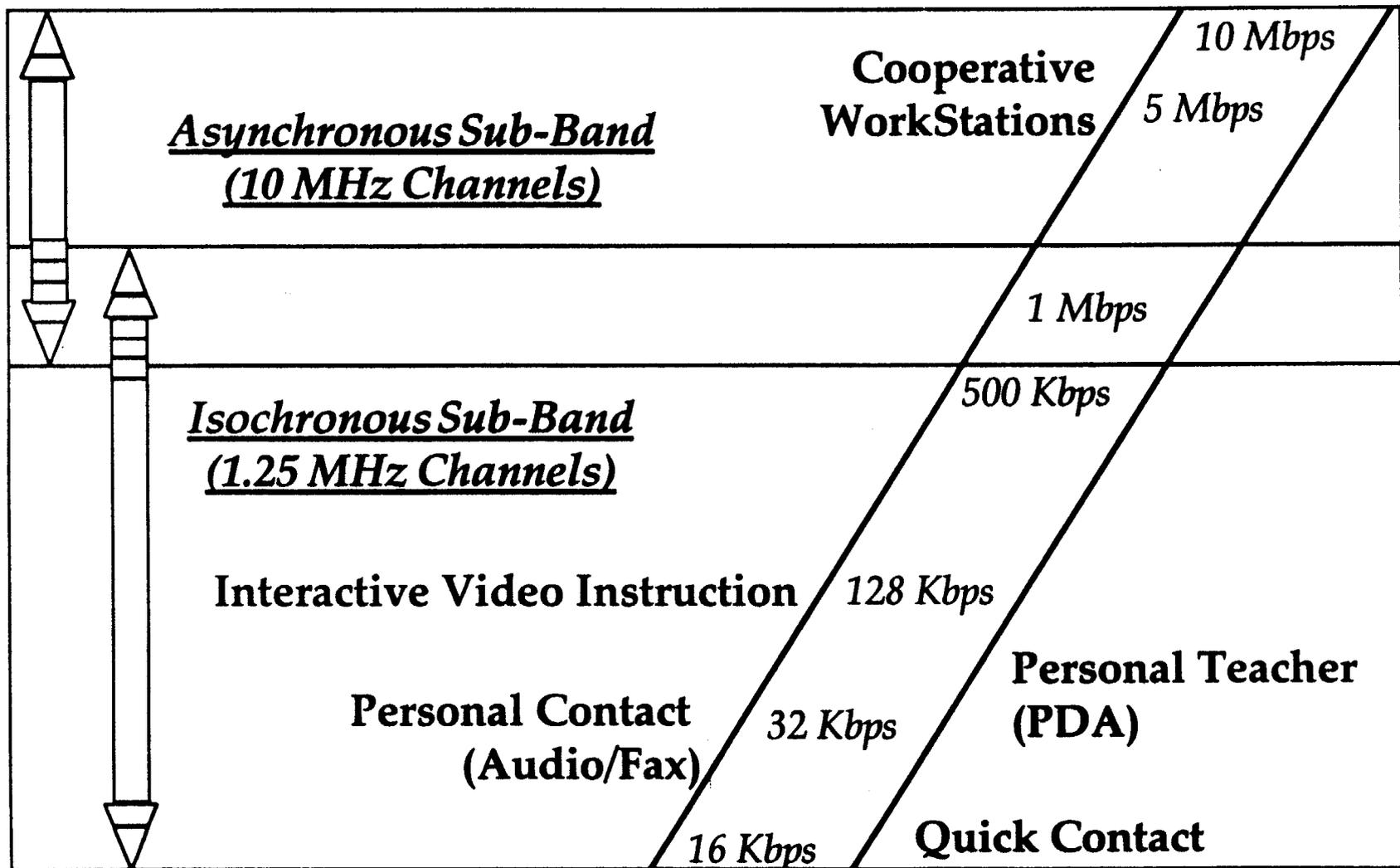
Statement of UTAM, Inc., , PCS Task Force Panel, April 12, 1994.

The Need for 40 MHz

- Technically supported in multiple WINForum contributions and two (2) Ex Parte
- 40 MHz identified as minimum
- Consistent with viable product offerings
- Consistent with High Density Applications, such as the Wire-less Classroom

The Wire-less Classroom

Achieved with the Current UPCS Allocation!



The Wire-Less Classroom

Implementing the Vision . . .

. . . User PCS (UPCS) Allocation

- **Minimum Needs:**

- *Isochronous Spectrum (20 MHz)*

- » Quick Contact (Short Messaging)
 - » Personal Contact (Audio/Fax)
 - » Personal Teacher (PDA)
 - » Inter-Active Video Instruction

- *Asynchronous Spectrum (20 MHz)*

- » Work Groups using Coordinated Work Stations
 - » Wireless Local Area Networks

Personal Teacher (PDA)

- **Library Access (on-line NOW!)**
 - *Clionet (Australia)*
 - *LC Marvel! (Library of Congress)*
 - *Lexis/Nexis*
 - *Singapore Daze*
- **Personalized Instruction**
- **Personalized Course Planning**

Inter-Active Video Instruction

- **Remote Class Room**
 - *Electronic “Black Board”*
 - *PDA to Video Viewing*
 - *Person to Person “Connection” via Video*
- **Networks of Classrooms**
 - *Collaborative Instruction*
 - *New Teacher - Student Paradigm*
 - *Diversity Learning*

Cooperative Workstations

- **Ad-Hoc Workgroups using Wireless LAN and Peer-to-Peer Workstations (IEEE 802.11)**
- **Technical Clarifications Needed to Fulfill the Vision**
 - *Power Level Specification*
 - *Spectrum Access and Transmission Burst Timing*
 - *Emission Bandwidth*
 - *Reaction Time Definition*

Conclusion

- **Current UPCS Spectrum is needed and justified, for data, audio and video PCS**
- **Current UPCS Spectrum Plan showing equal split is appropriate**
- **Access to Information Super Highway will be via both Isochronous and Asynchronous Devices**