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

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

GEN Docket No. 90-314 RM-7140 RM-7175

To: The Commission

## REPLY COMMENTS OF IEEE 802 LOCAL AREA NETWORK STANDARDS COMMITTEE

These reply comments are offered with reference to comments filed by others in this proceeding, and more specifically those of the following commenters: Apple Computer, NCR and Chandos Rypinski.

A description of IEEE and the Local Area Network Standards Committee 802 (IEEE 802) was provided in our comments previously filed in this matter.

IEEE 802 wishes to again emphasize the importance of providing short-distance radio Local Area Network (LAN) frequency space which may or may not be related to action on frequency allocation for PCS. In particular, IEEE 802 generally concurs with those comments of Apple Computer and NCR concerning the market size and importance of radio LAN service.

IEEE 802 further concurs with Apple and NCR in urging the Commission to "initiate a separate parallel proceeding dedicated to the needs of wireless LAN and other data services," or to "broaden" the current proceeding to include the same end.

Subsequent to the filing date for comments in this matter, IEEE 802 held a plenary meeting at La Jolla, California in which there was a working group meeting of those parties specifically interested in the development of suitable standards for radio LAN. The registered attendance for this meeting was 78 individuals representing 60 different companies. The interest mailing list maintained by the Chairman now includes 200 names. These numbers are given to demonstrate the breadth, intensity and scale of interest in the technical details of this subject.

The IEEE 802 working group has considered the matter of the magnitude of the bandwidth required for this service. The purpose of this working group is to define a physical medium and access protocol as a standard for radio LAN service. It is not possible to anticipate in any detail at this time the conclusions which this group might ultimately reach. Accordingly, the bandwidth estimate offered below is tentative and general.

In an office space, one worker with computer and telephone occupies about 100 square feet and depends upon two or more telephone pairs and coaxial cable carrying peak data rates of 1 to 20 Mb/s. The radio LAN being defined by the IEEE 802 working group will provide the same or equivalent capacity. Multiple geographically-proximate radio LANs will be able to coexist.

While it is premature to specify with finality the total bandwidth requirements for radio LAN data usage, 70-140 MHz is our current estimate.

Respectfully submitted,

Dated

Donald C. Loughry Chairman, IEEE 802-0 Hewlett-Packard Company 19420 Homestead Road, M/S 43UC Cupertino, CA 95014 (408) 447-2454 FAX = 447-3660