EX PARTE OR LATE FILED

Lucent Technologies
Bell Labs Innovations

David B. Jeppsen, Esq.
Federal Public Affairs Director

Lucent Technologies Inc.
Suite 700
900 19th Street, N.W.
Washington, DC 20006-2190

Telephone 202 530 7050
Facsimile 202 530 7007
E-Mail djeppsen@lucent.com

March 28, 1997

By Hand

William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Re: GN Dkt. No. 96-228/Wireless Communications Service

Dear Mr. Caton:

Enclosed please find a technical statement in response to the March 10, 1997 Petition for Expedited Reconsideration of the Wireless Cable Association International ("WCA").

Should there be any questions about this filing, please contact me.

Sincerely,

David B. Jeppsen

Enclosure
cc: by hand:

Rudy Baca, Office of Comm. Quello
Jonathan Cohen, WTB
Bruce Franca, OET
Julius Genachowski, Office of Chm. Hundt
Jane Mago, Office of Comm. Chong
Michael Marcus, OET
Tom Mooring, OET
David Siddall, Office of Comm. Ness
Paul J. Sinderbrand, Esq.
Richard Smith, OET
Tom Stanley, WTB

Lucent Technologies
Bell Labs Innovations

Lucent Technologies Inc.
900 19th Street, N.W.
Washington, DC 20006-2190

Technical Statement of Lucent Technologies Inc.

The Wireless Cable Association ("WCA") has requested that an EIRP limit be placed on the emissions limits of Wireless Communications Service ("WCS") base stations in the 2.3 GHz band. This would provide a known limit so that MMDS radios could be designed to block any interference generated by WCS base stations. Because no limit currently exists, WCA proposed a limit of 20 Watts EIRP. WCA goes on the state that "there is no evidence before the Commission in this proceeding that suggests that such a power limitation would decrease the value of WCS spectrum or preclude WCS licensees from deploying their facilities in the most optimal manner." WCA Petition at 18.

Lucent agrees with WCA that emissions limits should be imposed on WCS base stations. However, a limit of 20 Watt EIRP would unduly constrain wireless local loop ("WLL") applications in this band. Current and proposed WLL systems utilize high-gain antennas to reduce interference to other users, and reduce the necessary transmission power. However, the systems still transmit with EIRPs on the order of 100 to 150 Watts. This is necessary particularly in rural and suburban applications to limit the number of base stations. Restricting the EIRP to 20 Watts will increase the number of cells needed by more than two or three times, and would be unacceptable for WLL system deployment. Therefore, Lucent Technologies proposes an EIRP of 150 Watts be imposed upon WCS base stations in this band.

In addition, most WLL systems are designed with large bandwidths to accommodate high data rates and many simultaneous users in a single channel. When these wideband signals are mixed with other transmissions to form IMD products, the IMD products themselves are wideband. Therefore, the IMD products are often not as large a threat to other systems as narrowband products would be. Therefore, Lucent feels that a emission limit of 150 Watts would be an acceptable value for MMDS systems, as they are currently configured.

We would also request that the Commission provide the possibilities for waivers to the emissions limits if the parties involved could agree that higher power would not affect performance of their systems. The Commission should also consider increasing these limits at a later date after the MMDS industry has had an opportunity to upgrade their equipment, as necessary, to avoid harmful interference.