
IEEE P802.11
Wireless LANs

To: ETSI Board

Cc: Jamshid Khun-Jush, ETSI BRAN Chairman and PHY WG Rapporteur
Mr. M. Koga, MMAC
Jim Carlo, IEEE P802, Chairman
Vic Hayes, IEEE P802.11 Chairman
Naftali Chayat, IEEE P802.11 TGa Chairman
Howard Frazier, IEEE P802, Recording Secretary
Mary Shepherd, IEEE Standards Department, Intellectual Property Manager

Date: July 8, 1999

Subject: **Request for considering adopting the IEEE P802.11 Wireless WAN standard in conjunction with the P802.11a 5 GHz Physical Layer as a member of HIPERLAN family of standards**

Dear ETSI Board Members,

The Institute of Electrical and Electronics Engineers, Inc. (IEEE) is a USA-based international professional organization with more than 325,000 members representing a broad segment of the computer and communications industries. The IEEE P802.11 Working Group has developed a standard for Wireless Local Area Networking (WLAN) in the 2400-2483.5 MHz band ("the 2450 MHz ISM band"). The number of individuals and corresponding company sponsorships in the IEEE 802.11 Working Group evidences the strong interest in wireless local area networking. The Working Group currently has **XXX** voting members employed by **YYY** companies. The 802.11 Wireless LAN Standard in the 2.4 GHz band enjoys significant success worldwide, and in particular in Europe. The 802.11 standard was adopted in January 1999 as an ISO 8802-11 International Standard.

In 1997 the 802.11 established a Task Group to develop a high-speed physical layer to work in conjunction with the 802.11 MAC. The physical layer developed by the 802.11a is in its final approval stages. The development of the 802.11a High Speed Physical Layer for the 5 GHz band is tightly coordinated with ETSI BRAN Standards Committee. The coordination effort intensified since September 1998, after both standards committees have chosen OFDM as the basis modulation. We were able to reach agreement on all basic parameters of the modulation. We held joint meetings in September 1997 in London, UK, and in January 1999 in Orlando, Florida. Comments by BRAN as a whole and by individual BRAN members were considered during the 802.11a Working Group ballots. Several significant changes made to 802.11a are a result of adopting BRAN's comments. We would like to thank the BRAN members and in particular the PHY chair, Jamshid Khun-Jush, for the participation in the process and for the expertise they brought.

The 802.11a high-speed WLAN standard, developed for the 5 GHz band, faces an obstacle in Europe, since the license exempt bands at 5 GHz in Europe are designated by CEPT for the HIPERLAN project.

We are asking ETSI, as a body which continues to develop the HIPERLAN family of standards within the BRAN working group, to consider adopting the IEEE 802.11 with the 802.11a Physical Layer as a member of the HIPERLAN family. We are aware of the market overlap between the 802.11a and the HIPERLAN/1. To support our request, we would like to stress the significantly higher level of compatibility between the BRAN's HIPERLAN/2 project and the 802.11a. In particular, several points are worth mentioning. The channelization structure of 802.11a is compatible with HIPERLAN/2. The extreme similarity of the Physical Layers will facilitate reuse of technology and production of dual mode equipment. We would like to mention the precedence of the Direct Sequence and Frequency Hopping physical layers in 802.11, which coexist in the market and each found it's range of applications, and we believe that 802.11a devices can coexist in the market with HIPERLAN/1 devices in the same manner.

The agreement signed between IEEE and ETSI on 21 April, 1999, mentions the possibility that ETSI publishes the 802.11 as a PAS (Publicly Available Specification). We are asking specifically for a stronger status of a

membership in the HIPERLAN family because of the regulatory implications of it.

The Wireless Ethernet Working Group of MMAC-PC in Japan decided to adopt the combination of the 802.11 MAC and the 802.11a PHY layers as the Wireless LAN standard for the 5 GHz band. We are asking your support for introduction of the 802.11 MAC and the 802.11a PHY as a Wireless LAN standard in the 5 GHz band, which is available both in Europe and worldwide. We hope that the close cooperation between the 802.11, the ETSI BRAN and the MMAC will result in a suite of highly aligned standards for high rate Wireless Access and WLAN, which are applicable worldwide.

Sincerely,

IEEE-SA Official

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