IEEE P802.11 Wireless LANs

Proposed Liaison letter to ETSI

Date:

November 9, 1994

Note: This proposal was rejected by IEEE P802.11 on November 10, 1994

Dear Mr. Van Diepenbeek,

With interest we have taken note of your suggestion for increasing mutual understanding and mutual acceptance of the work of the committees. It is not the intent of the IEEE to ignore the valuable work done by your standards bodies.

As you correctly noted in your letter, the efforts of IEEE 802.11, which were initiated before ETSI started work on HIPERLAN, were and are aimed at developing a MAC with broad applicability and are supported by a growing number of PHY specifications. Our initial focus was on PHY specifications for the 2.4 GHz ISM band, the only band available on a world-wide basis. As other frequency bands within the USA and abroad become available, our 802.11 committee will develop the relevant PHY specifications.

It may well be that the 5.2 GHz band is the first candidate for such a new PHY specification and we will certainly take good note of the work RES 10 has done.

As regards the MAC specification now reaching its first formal review stage we note that, although it contains functions geared towards supporting the relatively low bit rates (1 Mbit/s or higher) as available under the current regulations for the 2.4 GHz ISM band, its application is not limited to that band. However, we do recognize that ETSI, thanks to the generous spectrum allocation by CEPT, is able to do valuable original work on functions that would further enhance the value of wireless LANs. We are certain that the 802.11 committee is willing to evaluate these additional functions in future work on their wireless LAN standard.

Further, we point out that the current specification has been designed by 802.11, notably in the area of radio medium access, to be applicable under a wide range of regulatory constraints, including the FCC Part 15 rules, the 1.9 GHz Data PCS rules, CEPT T/R 10-01 and the Japanese MPT rules for spread spectrum devices. As we understand the matter, ETSI has opted for a medium access method that, although possibly uniquely advantageous to high speed, wide bandwidth occupying, systems deployed in a "protected" band like the HIPERLAN in Europe, has less chance of fitting with generic medium contention access rules. Therefore we are concerned that the medium access method chosen by ETSI does not address such uses as Data LANs, multimedia PCS services, digital wireless voice to U.S. standards thus would have less relevance in the USA, which represents a large market for all manufacturers one of the world's major markets.

Given that medium access methods and functionality could be matched to the characteristics of the targeted frequency bands, We think it is worthwhile for our two organizations to continue work towards a common standard, notably for higher bitrate applications in added PHY specifications. Given the difference in structure, schedule time line and internal rules of our respective organizations, the formalization of very close co-operation seems difficult to achieve. We understand that there are a number of IEEE 802.11 members that are also ETSI members. We should find ways to make use of this shared membership in a more effective manner and exchange draft documents in a timely manner. We look forward to your suggestions on this matter.

Yours Sincerely,

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