

Relation Between IEEE P802.11 and Data-PCS

To: Members of IEEE 802.11

Wednesday, July 10, 1991

Many companies and participants in 802.11 filed Comments with the FCC on Apple's "Data-PCS" Petition, which has the primary objective of securing frequencies favorable to RF LANs.

Some Comments endorse that principal goal but not surprisingly, not all the comments support ALL the proposals Apple made to the FCC. As we hoped, there were thoughtful, constructive challenges and counter-proposals on details. It's precisely this healthy interchange that Apple sought and that the issue deserves.

Our Petition said in part:

"Determining the regulatory requirements for Data-PCS is a complex undertaking. At this juncture, Apple proposes only general objectives and a regulatory framework for meeting them, and does not propose precise specifications to be incorporated in FCC rules for Data-PCS. There should be a thorough dialogue, within the industry and between the Commission and industry, both within and without the rule-making process, to refine the details."

IEEE 802.11 is the vital forum for this process, and Apple is fully committed to 802.11.

We are concerned about two possibilities that the FCC is perceiving mixed messages.

First, some presentations to the FCC, because they present diversity of ideas on details, appear to have been interpreted as divided industry positions on the basic issue of whether frequencies should be identified for wireless LANs and regulated appropriately. We don't agree with this interpretation — we all need suitable media —, but nevertheless it may be happening.

Second, several companies advised the FCC that their Rulemaking process must incorporate the output from 802.11's tasks before addressing the question of allocating frequencies for WLANs. We think this, if not further explained, can damage our joint cause.

We agree that 802.11 must continue everything possible to align positions, set standards, and provide guidance to the FCC, but the fundamental identification of which frequencies, how much bandwidth, and potential in-band interferers cannot wait for 802.11's conclusions; the window for getting "new" spectrum is narrow and 1992-93 is too late to start that process.

Quite the contrary: 802.11 must make assumptions on the medium before effective MAC and PHY layers for WLANs can be defined and standards proposed. At this time 802.11 is constrained to assuming FCC §15.247 is the regulatory environment in which RF WLANs must operate. Section 15.247 requires spread spectrum, and subservient coexistence with incompatible interferers in the ISM bands. Apple started our frequency initiative to broaden media alternatives and, if possible, to create better ones. 802.11 needs something better to work with than §15.247.

We believe, emphatically, that if the FCC process isn't initiated until 802.11 completes its work, it will no longer be possible to achieve a regulatory environment, including new frequencies, favorable to WLANs. We think the FCC must open an official inquiry now leading to allocating frequencies. *Agreement within 802.11 on issues beyond that level is not necessary now, but this single goal, we believe transcends the varying positions we have as we work together in 802.11.*

We would like a consistent view of the fundamental need for spectrum, and direct interaction between 802.11 members and the FCC, to result in better media alternatives. Please take action, or call to discuss how you might do so.

Thanks.

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