

IEEE P802.11
Wireless LANs

Latter Ballot Motions from the FH group
approved with >50% and <75%

Date: May 24, 1995

Author: Jim McDonald, Chair FH-group

MOTION # 1:

Moved that sensitivity be specified at a PER of 10⁻² for a packet size of 112 bytes..

Background

Until recently, RF sensitivity and related specifications have been specified in terms of bit error rate, BER. During the January, 1995, meeting and during subsequent discussions it has been pointed out that packet error rate, PER is a more appropriate reference both from a functional and a measurement standpoint. At the May 1995, meeting Jerry Loraine presented a calculation that concluded that a packet error rate, PER, of 10⁻² was equivalent to a BER of 10⁻⁵ if the packet was 112 bytes long. (This calculation provided for a suitable header.) The motion above was proposed and passed but by less than 75%.

The vote in the Frequency Hop group for this motion was:

- For:..... 5
- Against:.....4
- Abstaining:....3

(Freq Hop Chair's note: It is the chair's impression that there is in general widespread support for the move from a BER to PER criteria. There is, however, concern on the part of some that the effects of transients, clock recovery noise, etcetera should be considered, and reflected in either a shorter packet size or a relaxation in the sensitivity specification. Others suggest that such relaxation is inappropriate.)

MOTION # 2:**Create a new managed object:*****aMPDU_Maximum_Length_2M = 800 octets.***

Background

During the discussion of MIB parameters and managed objects at the May 1995 meeting the subject of frame length surfaced. It was recalled that the original criteria for selection of the 400 Octet frame length was based on a consideration of the basic 1 Mb/s Frequency Hop PHY operation. At the basic rate of 1 Mb/s, the MPDU would require 3.2 mSec of transmission time. Transmission time was the fundamental consideration of the Frequency Hop group when this issue was originally considered. The Frequency Hop PHY now has 2 Mb/s as an optional data rate. It therefore seemed reasonable to allow the time of the MPDU at 2 Mb/s to be equal to the time of the MPDU at 1 Mb/s. This was the reason the new managed object was proposed. This motion passed in the Frequency Hop group, but by less than 75%.

The vote in the Frequency Hop group for this motion was:

For:..... 4

Against:.....3

Abstaining:...7

(Freq Hop Chair's note: It is the chair's impression that a major factor for the negative and abstaining votes was the fact that this issue had received extended discussion at several previous meetings albeit relative to the 1 Mb/s mode of operation.. In light of the previous deliberations, many were reluctant to support the motion even if the technical arguments were compelling.)