Comments to document IEEE P802.11-92/127r

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Abstract

In this contribution we propose our comments on the draft proposal for a Frequency Hopping Spread Spectrum PHY Standard.

Introduction

This contribution is a comment to the proposal made by Nathan Silberman in the IEEE P802.11-92/127r [1] for the 2.4GHz ISM band meeting FCC part 15.247. This contribution comments on both the requirements of the PHY and on the specifications. The main objective of the comments is to give more freedom to the manufacturer for selecting the appropriate design for each application. In addition some comments are proposed to allow lower cost product with reduced power consumption.

Requirements outline:

- bullet 11: This standard should cover not only small size networks but any kind of network, the network might be very large even if based on small cells, and therefore should protect collocated network.
- New bullet: In order to ease installation, and improve transmission reliability a transmit diversity capability might be included, and not left as implementation dependent.

Specifications

The objective of the following comments is to remove the requirements on the receiver, as the choice should be left to the manufacturer to decide how he wants to position his system in term of technical capability and cost trade-off.

- item 2 bis: add a specification item about the carrier frequency for each channel such as for example 2401, 2402....2482MHz.
- item 3: The number of hops per seconds should be from 2.5 to 40, to give maximum flexibility in error recovery and to minimize latency at higher level. This is in line with the contribution presented in the context of the medium access control protocol for Wireless LANs proposed in [2].