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Comments on P802.11a draft

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Comments on P802.11a #1

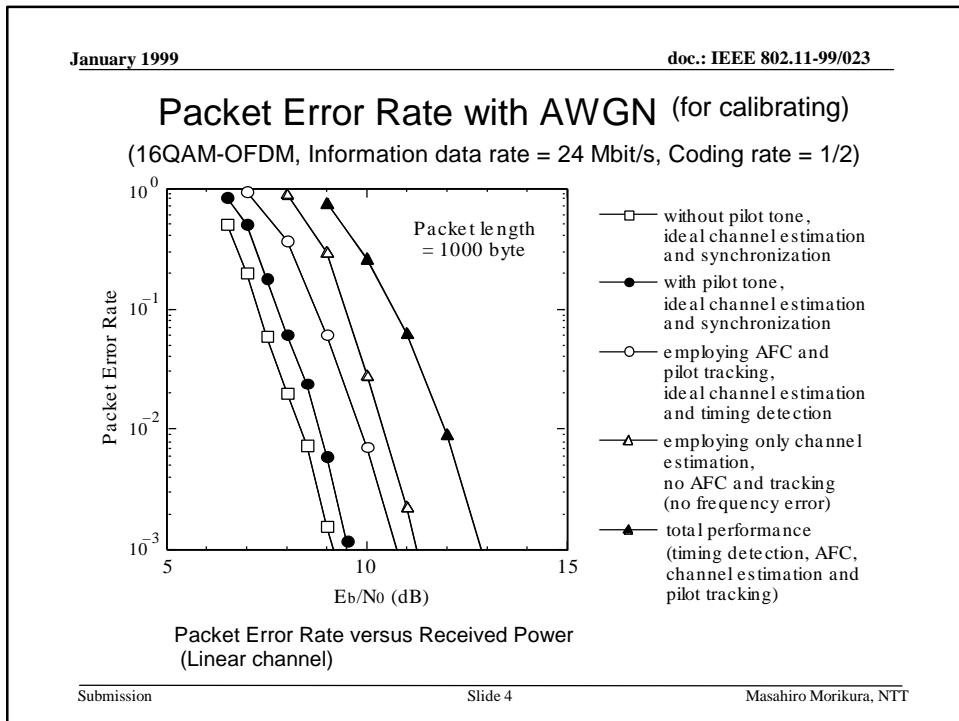
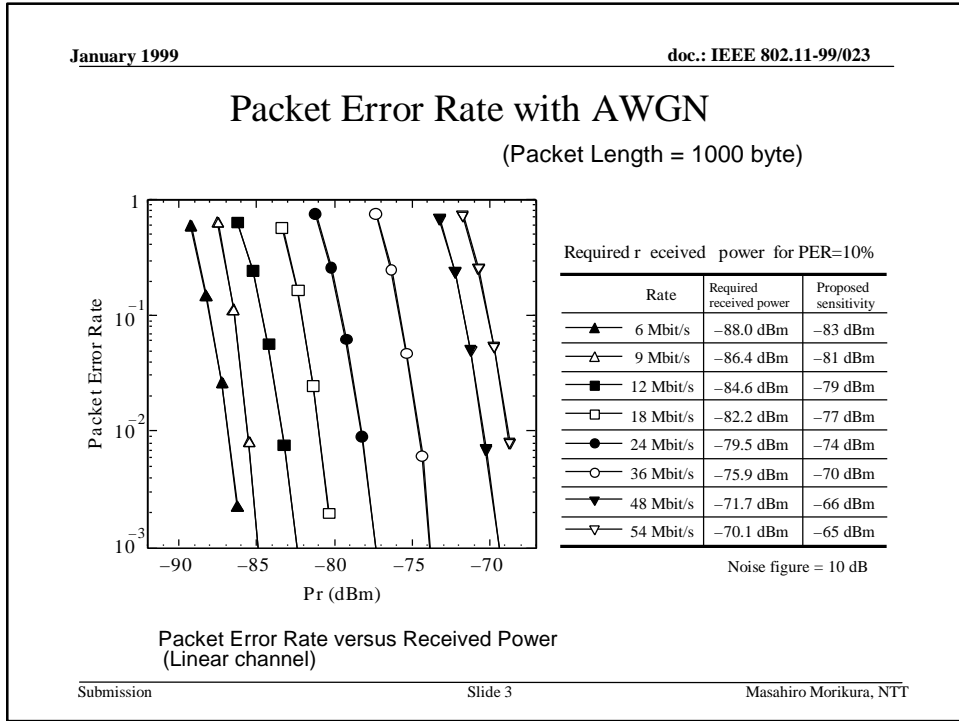
1.3.8.1 Receiver Minimum Input Level Sensitivity

The sensitivity values are specified by adding 5 dB margin to the required received power at 10% packet error rate in the case of 1000 byte MPDU length.

The current values for receiver sensitivity may be derived from the simulation results by using old system parameters.

➔ Re-evaluation is required.

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Recommended change on sensitivity

- The values of receiver minimum input level sensitivity are recommended to change as the following

Sensitivity in current draft

Rate	Current sensitivity
6 Mbit/s (BPSK, r=1/2)	-84 dBm
9 Mbit/s (BPSK, r=3/4)	-82 dBm
12 Mbit/s (QPSK, r=1/2)	-81 dBm
18 Mbit/s (QPSK, r=3/4)	Not described
24 Mbit/s (16QAM, r=1/2)	-78 dBm
36 Mbit/s (16QAM, r=3/4)	-72 dBm
48 Mbit/s (64QAM, r=2/3)	-66 dBm
54 Mbit/s (64QAM, r=3/4)	-64 dBm

➔

Recommended sensitivity

Rate	Required received power	Proposed sensitivity
6 Mbit/s	-88.0 dBm	-83 dBm
9 Mbit/s	-86.4 dBm	-81 dBm
12 Mbit/s	-84.6 dBm	-79 dBm
18 Mbit/s	-82.2 dBm	-77 dBm
24 Mbit/s	-79.5 dBm	-74 dBm
36 Mbit/s	-75.9 dBm	-70 dBm
48 Mbit/s	-71.7 dBm	-66 dBm
54 Mbit/s	-70.1 dBm	-65 dBm

Assumed noise figure = 10 dB

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Comments on P802.11a #2

1.3.7.2 Transmit Spectrum Mask

The transmit spectrum mask in current draft is tight for class AB amplifier.

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