

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Amendment of Part 15 of the Commission's Rules Regarding Spread Spectrum Devices)	
)	ET Docket No. 99-231
Wi-LAN, Inc)	
Application for Certification of an Intentional Radiator Under Part 15 of The Commission's Rules)	DA 00-2317
)	

REPLY COMMENTS OF TEXAS INSTRUMENTS

Texas Instruments Incorporated ("TI") submits these brief reply comments in response to the Further Notice of Proposed Rulemaking in the above-captioned proceeding, FCC 01-158, released May 11, 2001.

There is widespread agreement in support of the Commission's proposal to allow as few as fifteen hopping channels, without a mandatory requirement to employ adaptive hopping.

Similarly, there is widespread agreement in support of the Commission's proposal to establish a category of Digital Transmission System devices with spectral usage properties that will cause no more interference than existing Direct Sequence Spread Spectrum systems. However, as many have pointed out, the proposal to allow a power spectral density of 8 dBm per 3 kHz is not consistent with that proposal, and would result in substantial interference. A power spectral density limit of either 50 mW per 1 MHz or 100 mW per 1 MHz should be adopted instead.

Finally, we note the comments of Sirius Satellite Radio, which proposes to require out-of-band field strength limits of 14.6 and 18.6 dB μ V/m at 3 meters in the 2320-2332.5 MHz band for Part 15 devices whose fundamental emissions are in the 2400-2483.5 MHz

band. That subject is outside the scope of this proceeding. Out-of-band emissions for spread spectrum devices are subject to Section 15.247(c), which specifies that the limits of Section 15.209(a) are applicable. But nowhere does the FNPRM propose to change those limits. As Sirius acknowledges, Section 15.209(a) requires a field strength of 500 $\mu\text{V/m}$ at 3 meters for out-of-band emissions. Sirius has failed to provide any technical justification whatsoever, such as interference calculations or receiver sensitivity data, in support of its proposal for the much tighter limits of 14.6 and 18.6 dB $\mu\text{V/m}$. Consequently, the Commission should disregard those comments.

Conclusion

In light of these considerations, the Commission should adopt the proposal to allow as few as 15 hopping frequencies at 2450 MHz with a power limit of 125 mW, but without a requirement for adaptive hopping. The Commission should establish a category of Digital Transmission System devices under Part 15 with a maximum output power of 1 Watt and a power spectral density limit of either 50 mW or 100 mW per 1 MHz.

Respectfully submitted,

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