

FHH Telecom Law
November 2003

**FCC Proposes Further Changes
In Regulation of Unlicensed Devices**

*By: Mitchell Lazarus
703-812-0440
lazarus@fhhlaw.com*

Just weeks after releasing an order that cleans up loose ends in the "Part 15" rules on unlicensed devices (see story on preceding page), the FCC issued a Notice of Proposed Rulemaking taking up yet more Part 15 issues:

More sophisticated antennas for unlicensed devices, including sectorized, phased array, and steerable antennas.

Transmitter testing with only the highest gain antenna of each type to be used. (Today every combination of transmitter and antenna must be tested separately, which can drive up costs and delay.)

Substitution of "technically equivalent" transmitters, antennas, or RF power amplifiers in a previously certified system, if professionally installed by a party that offers commercial radio services (including wireless Internet service providers)

Harmonization of measurement rules for U-NII devices and Section 15.247 "digital modulation" devices so they both use average measurements. (The present rules regulate Section 15.247 devices according to peak measurements.)

Harmonization of power spectral density limits and out-of-band emissions limits between U-NII devices and Section 15.247 devices, so that both categories are subject to the same rules -- but the FCC does not say which set of rules it prefers.

Spread spectrum frequency hopping devices capable of supporting second generation Bluetooth products.

Provision for modular transmitters that are subdivided into separate units.

Proposed administrative changes include:

Deleting the procedure for requesting a special temporary authority (STA) for a Part 15 device. The FCC has now gone ten years now without a formal STA request.

Disallowing waivers for paper filings, so that all certification filings must be done electronically, including requests for grantee codes and name/address changes. (No

one has requested a filing waiver for five years.)

Increasing the number of not-yet-certified units that can be imported for demonstration, valuation, and testing.

Requiring that accredited labs be re-accredited every two years

Spectrum etiquette. In a potentially controversial move, the FCC asks whether it should require a "spectrum etiquette" for unlicensed devices generally. Presently only unlicensed PCS equipment is subject to an etiquette, which spells out in detail the procedures each device must use for choosing transmit frequencies and checking that they are vacant before use. Some of the more sophisticated non-PCS systems in use, including those based on IEEE 802.11 protocols, have listen-before-talk mechanisms or alternatives to avoid causing each other interference. But many less expensive products have no such capability. Requiring a spectrum etiquette would doubtless cut down on interference in the band, but could also alter the economics of the industry.

Comments are due 30 days after publication in the Federal Register, which should occur soon. Because the deadline is relatively short, companies interested in participating may wish to begin laying out their plans soon.