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any further requirement to vary supply voltage.

[58 FR 59180, Nov. 8, 1993; 59 FR 15269, Mar. 31, 1994. Redesignated at 59 FR 32852, June 24, 1994, as amended at 59 FR 32853, June 24, 1994; 59 FR 40835, Aug. 10, 1994; 59 FR 55373, Nov. 7, 1994; 60 FR 3303, Jan. 13, 1995; 69 FR 62621, Oct. 27, 2004; 77 FR 43013, July 23, 2012]

Subpart E—Unlicensed National Information Infrastructure Devices

§15.401 Scope.

This subpart sets out the regulations for unlicensed National Information Infrastructure (U-NII) devices operating in the 5.15–5.35 GHz, 5.47–5.725 GHz and 5.725–5.85 GHz bands.

[79 FR 24579, May 1, 2014]

§15.403 Definitions.

- (a) Access Point (AP). A U-NII transceiver that operates either as a bridge in a peer-to-peer connection or as a connector between the wired and wireless segments of the network.
- (b) Available Channel. A radio channel on which a Channel Availability Check has not identified the presence of a radar.
- (c) Average Symbol Envelope Power. The average symbol envelope power is the average, taken over all symbols in the signaling alphabet, of the envelope power for each symbol.
- (d) Channel Availability Check. A check during which the U-NII device listens on a particular radio channel to identify whether there is a radar operating on that radio channel.
- (e) Channel Move Time. The time needed by a U-NII device to cease all transmissions on the current channel upon detection of a radar signal above the DFS detection threshold.
- (f) Digital modulation. The process by which the characteristics of a carrier wave are varied among a set of predetermined discrete values in accordance with a digital modulating function as specified in document ANSI C63.17–1998.
- (g) Dynamic Frequency Selection (DFS) is a mechanism that dynamically detects signals from other systems and avoids co-channel operation with these systems, notably radar systems.

- (h) *DFS Detection Threshold*. The required detection level defined by detecting a received signal strength (RSS) that is greater than a threshold specified, within the U-NII device channel bandwidth.
- (i) Emission bandwidth. For purposes of this subpart the emission bandwidth shall be determined by measuring the width of the signal between two points. one below the carrier center frequency and one above the carrier center frequency, that are 26 dB down relative to the maximum level of the modulated carrier. Determination of the emissions bandwidth is based on the use of measurement instrumentation employing a peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.
- (j) *In-Service Monitoring*. A mechanism to check a channel in use by the U-NII device for the presence of a radar.
- (k) Non-Occupancy Period. The required period in which, once a channel has been recognized as containing a radar signal by a U-NII device, the channel will not be selected as an available channel.
- (1) Operating Channel. Once a U-NII device starts to operate on an Available Channel then that channel becomes the Operating Channel.
- (m) Maximum Power Spectral Density. The maximum power spectral density is the maximum power spectral density, within the specified measurement bandwidth, within the U-NII device operating band.
- (n) Maximum Conducted Output Power. The total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.