
From: Thomas Cokenias
Sent: Wednesday, December 21, 2011 10:15 PM
To: Mark Briggs
Cc: Joe Hsieh
Subject: Re: Silver Spring Networks, //OWS-IMU519 //AN11T0905

Hi Joe,

Here are the answers. I have also attached a document explaining how SSN creates hop sets. The example assumes 127 channels, but the formula and calculations are the same for 83 channels, just plug in different total channel numbers to generate the hopsets.

Any questions or concerns please let me know.
best regards

Tom

15.247(a)(1) The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

Attestation: The receivers used within the Silver Spring Network all hop in synchronization with the transmitter they are receiving data from. The input BW of the receiver is as wide as the transmitter bandwidth.

15.247 (g) Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. However, the system, consisting of both the transmitter and the receiver, must be designed to comply with all of the regulations in this section should the transmitter be presented with a continuous data (or information) stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its transmissions over the minimum number of hopping channels specified in this section.

Attestation: Regardless of the length of the data stream, the transmitter and receiver comply with all of the regulations in this section. If the data stream to be transmitted is longer than the maximum packet size, the data will be broken up into an appropriate number of packets and transmitted on different channels in the sequence. If the data stream is short and the whole hopping sequence is not employed, the following transmission will continue on the next frequency in the hopping sequence that had not yet been completed.

15.247 (h) The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

Attestation: The unit does not independently adjust its hopset. There is no frequency coordination between multiple transmitters