DFS Update
and Part 80 Reminder
TCB Workshop

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TDWR Band Usage 5600-5650 MHz

- Permitted under the new rules
- Some manufactures choose to block this band under the new rules for compatibility with manufacturers product line
  - If device is tested with TDWR band operational the manufacturer can market models with or without the TDWR band blocked
    - Grant will list the entire U-NII-2 band
  - If tested with TDWR blocked a Permissive Change is required to add the TDWR band
    - Grant will not list the TDWR band

Use of 802.11ac Channels That Straddle 5725 MHz

- Applicable for U-NII-2 band operating under the "old" rules and "new" rules
  - Ch. 138 - 80 MHz BW Mode
  - Ch. 142 - 40 MHz BW Mode
  - Ch. 144 - 20 MHz BW Mode
- Channels must comply with U-NII Rules
- The following tests are required for these channels
  - Conducted power
  - Power spectral density

Use of 802.11ac Channels That Straddle 5725 MHz

- Additional Requirements
  - Must meet all DFS requirements
  - Software Configuration Control
- Transmit Power Control (TPC) §15.407(h)
- Band edge measurements not required at 5725 MHz

DFS Test Frequencies – Statistical Performance Check

- KDB 905462 D02 v01r0 (Table 2 Note)
  - Tests should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth
    - Test report must clearly identify the test frequencies for each test
  - For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.

- Statistical tests can be performed on any device DFS channel

- Typically all 30 trials are run on the same frequency

Bin 5 Radar Detection Requirements

- Bin 5 (Includes Chirp Waveforms)
  - Chirp may start outside the channel radar detection BW
  - If the Chirp radar emission falls within the radar detection BW, it must be detected in order to count as successful detection
  - The worse-case Chirp center frequency will be at the detection BW edge
    - Bin 5 Chirp center frequency must be within or at the radar detection BW edges

Example

- Device – 80 MHz BW
  - Radar detection BW (100% OBW) = 76 MHz
  - Channel 106 (CF = 5530 MHz)
  - Bin 5 test frequencies
    - Edge 1: 5530 MHz - 38 MHz = 5492 MHz
    - Edge 2: 5530 MHz + 38 MHz = 5568 MHz
    - CF: 5530 MHz

Part 80 Reminder
DSC Handhelds

- Reminder Notice DA 14-1747 for handhelds
  - Devices can no longer be imported or marketed that meet old standards (RTCM Std. SC-101)
  - Must meet ITU Recommendation M.493-13
  - For Class D VHF DSC must meet IEC 62238
    - Dual receivers – one for voice and one for DSC operating on different channels
- Radios sold prior to March 25, 2015 may still be used

Questions and Answers

Thanks!