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!