



2022-11-16

FEDERAL COMMUNICATIONS COMMISSIONS

Authorization and Evaluation Division

7435 Oakland Mills Road

Columbia, MD 21046

Subject: Description of Permissive Change

Dear Sir/Madam,

We, [Cisco Systems, Inc.](#) hereby declared for the following project(s):

FCC ID: LDKCNWLE2638, Model: C9130AXE-B

This project is a Permissive Change II submission because Cisco Systems, Inc. Use the third radar engine in C9130AXI-B by allowing additional DFS functions. Please refer to following for detailed information:

Radio SoC used in C9130AXI-B has 3 radar detection engines. We were using two of those engines to support DFS in Tri-Radio/dual-5G mode. For this feature we are using the third engine.

For example:


- First 5G radio (5G1) serving clients on channel 52
- Second 5G radio (5G2) is serving clients on channel 100

We use 2 radar engines to detect radars on these two serving channels.

Suppose we want to move 5G1 to channel 64, then we tune the third radar engine to channel 64 and run CAC for 60 seconds. If No radar is found, then we move 5G1 to channel 64.

While testing third engine for Radar detection on channel 64 during CAC, we run 18% downlink traffic on 5G1

For the testing procedure, we based on the TCB Workshop Slides as the guidance (from April 11, 2018, presentation covering “Zero Wait DFS” presented by Dusmantha Tennakoon)



## “Zero Wait DFS”

- Manufacturer must:
  - Clearly describe the procedures with “back-up monitoring”
  - declare off-channel CAC time (cannot be less than 60 seconds).
- ❖ Configure device to transmit on typical radar channel. Off-channel CAC must be monitored on a different DFS channel. Use radar type 0 to verify that radar is detected on the off-channel during the manufacturer declared CAC time. Similar to procedures in EN 301 893

April 11, 2018 TCB Workshop 3

1. Configure the EUT for current channel with downlink traffic (greater than 17% duty cycle) to the client
2. Send the off-channel pre-CAC command for the future channel
3. Start statistics test on future channel (without configuring the EUT to the future channel), while data is transmitting on the current channel.
  - a. Monitor console communications for detection messages on the future channel
4. Run 30 trials
5. Record the results

Based on the above information and testing procedure, we confirmed above modifications didn't affect the RF sections.



We affirm that between BACL and [Cisco Systems, Inc.](#), any difference in understanding, including test plan, measurement methods, applicable standards and relevant procedures and processes have been resolved prior to commencement of testing activities.

This authorization is valid until further written notice from the applicant.

Sincerely Yours,

A handwritten signature in blue ink, appearing to read "Samuel Kim".

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