

February 10, 2016

Mr. Edgar Figueroa
President and CEO
Wi-Fi Alliance
10900-B Stonelake Boulevard, Suite 126
Austin, Texas 78759

Dear Mr. Figueroa:

In light of today's release of Wi-Fi/LTE-U Draft Test Procedures, we write to express our continued support for the Wi-Fi Alliance's (WFA) goal of finding a path to protecting consumers from interference, while emphasizing that today's draft represents a work in progress rather than a final plan for adequate testing.

The Draft Test Procedures are themselves a recognition that consumers need more than a demonstration of LTE-U device compliance with the LTE-U Forum Coexistence Specification, vendor statements, or other barometers of coexistence. In particular, it is important that the industry develop specific pass and fail metrics calibrated to ensure that LTE-U devices do not disproportionately degrade Wi-Fi performance across a range of realistic testing scenarios. We believe that the Draft Test Procedures are generally on a good trajectory in this regard, and we strongly urge that this rigorous approach continue to be strengthened as the test plan is further developed.

Because of the importance of the WFA's work, it must be made clear what the draft plan is and what it is not. The draft is a work in progress and has been released to show the direction of our project. It is not yet a consensus final test plan and it does not yet represent a sufficient framework for testing coexistence. Central technical issues, which are essential to making the test procedures reliable, remain unresolved. As the draft test plan itself notes:

As of this writing, the test plan addresses only one of several sets of tests to be designed by Wi-Fi Alliance. It is therefore incomplete and cannot be used to determine unlicensed LTE coexistence until approved by the Wi-Fi Alliance board in its entirety. Later document versions will add more complex topologies and traffic loading.

Until the WFA has completed its work, it cannot be determinatively judged as to its efficacy, nor can any draft, partial, or incomplete test plan be used to assess LTE-U coexistence. Specific technical matters that the WFA must continue to work through include the following fundamental issues:

- A requirement to test coexistence at average Wi-Fi signal power levels that represent the full range of typical consumer experience, instead of unrealistically testing coexistence assuming strong Wi-Fi power levels;

- Testing of coexistence of multi-channel LTE-U operation, ensuring that such mechanisms are calibrated to minimize the negative impact on Wi-Fi consumers;
- Testing of in-device coexistence; in particular, ensuring that LTE-U signals do not interfere with Wi-Fi network identification and selection; and
- Testing of common, real-world network topologies and traffic loading scenarios, rather than only testing the most simplistic cases.

Use of the Draft Testing Procedures document as the basis for coexistence testing before the WFA resolves these issues would recklessly permit preliminary test outcomes to be misconstrued as a comprehensive indication of coexistence and would undermine the consensus-based process we have all committed to pursue. We therefore request that the WFA emphasize in its external communications that much more collaboration and technical work is needed before this document can be utilized for its intended purpose. We remain committed to the WFA process and thank you for the hard work by you and your staff that this draft represents. We look forward to continuing this work in a way that serves the needs of the millions of Wi-Fi users across the country and preserves the unlicensed bands as a place where new technologies can thrive.

Sincerely,

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