

IEEE 802.11 Working Group Liaison Statement to 3GPP RAN4 in relation to certain channel combinations for LAA in 5GHz

Source: IEEE 802.11 Working Group¹

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Subject: IEEE 802.11 Working Group Liaison Statement to 3GPP RAN4 on certain channel combinations for LAA in 5GHz

Approval: Approved 2018-07-13 by the IEEE 802.11 Working Group

Dear Mr. Xutao Zhou,

Thank you for supporting the ongoing cooperation between the IEEE 802.11 Working Group and 3GPP RAN4 in relation to coexistence between LAA and 802.11 systems.

The LAA specification ([1]) includes a clause specifying that for LAA multi-carrier transmissions with four or less carriers, the maximum frequency separation between the centre frequencies of these carriers will be less than or equal to 62MHz, unless the absence of 802.11 systems can be

¹ This document represents the views of the IEEE 802.11 Working Group, and does not necessarily represent a position of the IEEE, the IEEE Standards Association, or IEEE 802.

guaranteed in these carriers. This clause is important to promote fair coexistence between multi-carrier transmissions of LAA and 802.11 systems.

However, we notice that 3GPP RAN4 has defined carrier aggregation schemes for LAA where the maximum separation between the centre frequencies of carriers is greater than 62MHz. Some example aggregation schemes are CA_2A-46A-46D, CA_4A-46A-46D, and CA_46A-46D-66A ([2]).

The IEEE 802.11 Working Group requests that 3GPP RAN4 clarify the following:

1. Will the cited carrier aggregation schemes for LAA only be used in the guaranteed absence of 802.11 systems?
2. If the absence of 802.11 systems on these carriers cannot be guaranteed, how does 3GPP RAN4 intend to adhere to the cited clause in the LAA specification, in order to ensure fair coexistence between LAA and 802.11 systems?

The IEEE 802.11 Working Group looks forward to a continued, productive exchange with 3GPP RAN4 on this and other matters of mutual interest.

For your information, the next two IEEE 802.11 Working Group meetings are 9-14 September 2018 in Hawaii, USA and 11-16 November 2018 in Bangkok, Thailand.

Regards,

Dorothy Stanley, Chair, IEEE 802.11 Working Group

References

[1] 3GPP TS 36.300, Release 14

[2] 3GPP TS 36.101 V15.2.0