IEEE P802.11  
Wireless LANs

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| 802.11  Liaison statement from 3GPP RAN re: Certain Channel Combinations in LAA | | | | |
| Date: 2019-03-26 | | | | |
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**Abstract**

This document contains a liaison statement received from 3GPP RAN in response to a liaison from the 802.11 WG (in July 2018) regarding certain channel combinations in LAA, see <https://mentor.ieee.org/802.11/dcn/18/11-18-1305-02-coex-proposed-ls-to-3gpp-ran4-on-certain-channel-combinations-in-laa.docx> .

A prior liaison statement was received from 3GPP RAN, see <https://mentor.ieee.org/802.11/dcn/18/11-18-1687-00-0000-2018-09-liaison-from-3gpp-ran-re-certain-channel-combinations-for-laa-in-5ghz.docx> .

A prior liaison response was received from 3GPP RAN4, see

<https://mentor.ieee.org/802.11/dcn/18/11-18-1561-00-0000-3gpp-ran-wg4-reply-ls-to-ieee-802-11-wg-regarding-certain-channel-combinations-for-laa-in-5ghz.docx> .

This received liaison is from 3GPP RAN and is embedded below and reproduced on the following pages.



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| **3GPP TSG RAN Meeting #83 RP-190758**  **Shenzhen, China, March 18th – 21st 2019**  **Title:** Reply LS to IEEE 802.11 working group in relation to certain channel combinations for LAA in 5GHz  **Response to:** Reply LS to IEEE 802.11 working group in relation to certain channel combinations for LAA in 5GHz  **Release:** Rel-13, Rel-14, Rel-15, Rel-16  **Source:** 3GPP TSG RAN  **To:** IEEE 802.11 Working group, Dorothy Stanley Chair (IEEE 802.11 WLAN Working Group: [dstanley@ieee.org](mailto:dstanley@ieee.org)),  Konstantinos Karachalios, Secretary, IEEE-SA Standards Board, Secretary, IEEE-SA Board of Governors ([sasecretary@ieee.org](mailto:sasecretary@ieee.org)),  Paul Nikolich, Chair, IEEE 802 LMSC ([p.nikolich@ieee.org](mailto:p.nikolich@ieee.org)),  Jon Rosdahl, Vice-chair, IEEE 802.11 WLAN Working Group ([jrosdahl@ieee.org](mailto:jrosdahl@ieee.org)),  Robert Stacy, Vice-chair, IEEE 802.11 WLAN Working Group ([robert.stacey@intel.com](mailto:robert.stacey@intel.com)),  Andrew Myles, IEEE 802.11 Coexistence Standing Committee Chair ([amyles@cisco.com](mailto:amyles@cisco.com))  **Cc:** RAN WG4, RAN WG2, RAN WG1  **Contact Person:** Name: Maulik Vaidya **Tel. Number:**  E-mail Address:maulik.vaidya@charter.com  **Send any reply LS to: 3GPP Liaisons Coordinator,** [**mailto:3GPPLiaison@etsi.org**](mailto:3GPPLiaison@etsi.org)  **Attachments:**  **1. Overall Description:**  Further to 3GPP TSG RAN’s LS to IEEE 802.11 WG in RP-182178, 3GPP TSG RAN would like to inform IEEE 802.11 WG that the following has been agreed in 3GPP RAN WG4 and WG2: The logic for type B multi-carrier downlink transmissions on multiple Scells configured in Band 46 when maximum separation between the center frequencies of any two of the carriers on which LAA transmissions are performed is > 62 MHz and <= 62 MHz, from Rel-13 onwards has been agreed. It is noteworthy to mention thatThe former condition (of when frequency separation is >62MHz) per TS 36.300 clause 5.7 is effectively deprecated for this case by allowing LTE LAA multi-carrier downlink transmissions to follow WiFi-like channel bonding. This will also allow LTE LAA to aggregate >4 Component Carriers (CCs). With this, 3GPP TSG RAN hopes to have adequately covered IEEE 802.11 WG’s questions #1 and #2 (quoted below) in RP‑181524:  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?*  Further to above, type B multi-carrier downlink transmissions are allowed, as an exception, for channels (EARFCN: 46890, 48690, 50090, 53540) when maximum frequency separation between the center frequencies of any two of the carriers on which LAA transmissions are performed is > 62MHz.The system behavior for when frequency separation is <=62MHz remains unchanged i.e. type B multi-carrier downlink transmissions for when center carrier frequency separation is <=62MHz does not follow channel bonding restrictions.The logic for Type 2 channel access for multi-carrier uplink transmissions on multiple Scells configured in Band 46 (Rel-14, Rel-15, and Rel-16) is also being provided. The updated affected specifications should become available after March 2019.  3GPP TSG RAN looks forward to a continued, productive exchange with IEEE 802.11 WG in matters of mutual interest.  **2. Date of Next TSG-RAN Meetings:**  TSG-RAN Meeting #84 3rd – 6th June 2019 Newport Beach, California, USA  TSG-RAN Meeting #85 16th – 19th Sept 2019 Newport Beach, California, USA |