IEEE P802.11
Wireless LANs

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| CR for BQR |
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| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Yunbo Li | Huawei |  |  | liyunbo@huawei.com |
| Ming Gan |  |  |  |  |
| Yuchen Guo |  |  |  |  |
| Guogang Huang |  |  |  |  |
| Zhenguo Du |  |  |  |  |
| Yue Zhao |  |  |  |  |
| Maolin Zhang |  |  |  |  |
| Stephen McCann |  |  |  |  |
| Edward Au |  |  |  |  |
|  |  |  |  |  |
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Abstract

This submission proposes comments resolution of the following 2 CIDs received for TGbe LB275:

CIDs:

19342

19343

Revisions:

* Rev 0: Initial version of the document.

***TGbe editor: The baseline for this document is IEEE 802.11be D4.1***

1. **Introduction**

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGbe Draft. The introduction and the explanation of the proposed changes are not part of the adopted material.

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| **CID** | **Commenter** | **Clause**  | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| 19342 | Brian Hart | 9.2.4.7.6 | 127.16 | BQR Control is a MAC-level behavior and can only use PHY features exposed via the MAC-PHY interface. The "ED-based CCA defined in 36.3.21.6.4" cannot be referenced directly unless it is present in the MAC-PHY interface (and then that interface parameter should be referenced instead). However, at P118L48 and P889L4 we see that the per20bitmap is only available if the operating channel width is greater than 20 MHz. | 1) Refer to the per20bitmap (and STATE(?) - see next) parameter(s) in the PHY-CCA.indication. Also 2) either require per20bitmap to be present even in a 20 MHz operating channel or (preferred?) rewrite BQR Control to use the PHY-CCA.indication STATE parameter in the case of a 20 MHz operating channel. | RevisedAgree with the commenter.Change the reference from “ED-based CCA defined in 36.3.21.6.4(Per 20 MHz CCA sensitivity)” to “ based on the PHY-CCA.indication primitive (see 36.3.21.6 (CCA sensitivity) and 8.3.5.12 (PHY-CCA.indication))”Similar modifications for non-EHT non-AP HE STA.TGbe editor to make the changes with the CID tag 19342 in doc 11-23/1795r1 |
| 19343 | Brian Hart | 9.2.4.7.6 | 127.16 | Error recovery is a MAC-level behavior and can only use PHY features exposed via the MAC-PHY interface. The "ED-based CCA" (likely defined in 36.3.21.6.4" from other context?) cannot be referenced directly unless it is present in the MAC-PHY interface (and then that interface parameter should be referenced instead). However, at P118L48 and P889L4 we see that the per20bitmap is only available if the operating channel width is greater than 20 MHz. | 1) Refer to the per20bitmap (and STATE(?) - see next) parameter(s) in the PHY-CCA.indication. Also 2) either require per20bitmap to be present even in a 20 MHz operating channel or (preferred?) rewrite this error recovery to use the PHY-CCA.indication STATE parameter in the case of a 20 MHz operating channel. Similar issue at P127L16, P560L54 | Revised Rrror recovery is not described in subclause 9.2.4.7.6.Nevertheless, the commenter’s concern at P560L54 is valid.Propose to change “through an ED based CCA” to “base on the PHY-CCA.indication primitive (see 36.3.21.6 (CCA sensitivity) and 8.3.5.12 (PHY-CCA.indication))” in P571L34 of IEEE802.11 be draft 4.1.The commenter’s concern at P127L16 is also valid. Propose to change the reference from “ED-based CCA defined in 36.3.21.6.4(Per 20 MHz CCA sensitivity)” to “ based on the PHY-CCA.indication primitive (see 36.3.21.6 (CCA sensitivity) and 8.3.5.12 (PHY-CCA.indication))”Similar modifications for non-EHT non-AP HE STA.TGbe editor to make the changes with the CID tag 19343 in doc 11-23/1795r1 |

***Editing instructions formatted like this are intended to be copied into the TGbe Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

1. **Proposed spec text**

***TGbe editor: Modify the paragraphes in 9.2.4.7.6 (BQR Control) as follows:***

For a non-EHT non-AP HE STA, or a non-AP EHT STA that is associated with a non-EHT HE AP, each bit in the bitmap corresponds to a 20 MHz subchannel within the operating channel width of the BSS in which the STA is associated, with the LSB corresponding to the lowest numbered operating subchannel of the BSS. The bit in position *X* in the bitmap is set to 1 to indicate that the subchannel *X* + 1 is idle; otherwise, it is set to 0 to indicate that the subchannel is busy or unavailable. The availability of each 20 MHz subchannel is based on the (#19342) PHY-CCA.indication primitive (see 27.3.20.6 (CCA sensitivity) and 8.3.5.12 (PHY-CCA.indication)) and is reported for the 20 MHz subchannels located in the operating channel of the reporting STA, when the WM is idle as defined in 26.5.2.5 (UL MU CS mechanism).

For a non-AP EHT STA that is associated with an EHT AP, each bit in the bitmap corresponds to a 20 MHz subchannel within the operating channel width of the BSS in which the STA is associated, with the LSB in the first BQR Control subfield (or the only BQR Control subfield) corresponding to the lowest numbered operating subchannel of the primary 160 MHz (or of the BSS), and with the LSB in the second BQR Control subfield, if present, corresponding to the lowest numbered operating subchannel of the secondary 160 MHz. The bit in position *X* in the bitmap is set to 1 to indicate that the subchannel *X* + 1 is idle; otherwise, it is set to 0 to indicate that the subchannel is busy or unavailable. The availability of each 20 MHz subchannel is based on the (#19342) PHY-CCA.indication primitive (see 36.3.21.6 (CCA sensitivity) and 8.3.5.12 (PHY-CCA.indication)) and is reported for the 20 MHz subchannels located in the operating channel of the reporting STA, when the WM is idle as defined in 35.5.2.4 (UL MU CS mechanism for EHT STAs).

***TGbe editor: Modify the last paragraphes in 35.3.16.7 (Error recovery on an NSTR link pair within PIFS) as follows:***

35.3.16.7 Error recovery on an NSTR link pair within PIFS

If the time from the end of the received PPDU carrying the response frame to the next PPDU sent in the same TXOP is larger than SIFS and less than PIFS, then the STA affiliated with the MLD shall ensure that the medium is idle based on PHY-CCA.indication primitive (see 36.3.21.6 (CCA sensitivity) and 8.3.5.12 (PHY-CCA.indication)) (#19343) before the transmission of the next PPDU.

***End of change***