IEEE P802.11
Wireless LANs

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| 802.11 TGac WG Letter Ballot LB190Proposed resolutions on MAC Comments |
| Date: 12 Nov 2012 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Menzo Wentink | Qualcomm | Straatweg 66, Breukelen, The Netherlands | +31-65-183-6231 | mwentink@qualcomm.com |

These comments were submitted on LB190 on 802.11ac draft 4.0. The proposed resolutions are relative to 802.11ac draft 4.0 (as indicated in each resolution). Changes are indicated by a mixture of Word track-changes and editing instructions.

The following CIDs are covered in this document (total 5): MAC 7325, 7371, 7364, 7388, 7326.

History: R0 - initial revision, R1: added 7326, R3: changed CID 7365 to 7371 as it should be.

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| **CID** | **Comment** | **Proposed Change** |
| 7325 | Nothing stops a BFee from generating a huge-duration BF response, totally wrecking the purpose of the TXOP Limit, which is to ensure no one device can hog the medium for too long | Put some constraint on BFees' BF report duration, so that BFers can estimate the worst-case duration. Require BFers to take measures to ensure the TXOP Limit is not violated in this worst case |
| 7371 | Steps should be taken to ensure that a BFee does not violate a non-zero TXOP Limit, else the whole point of the TXOP Limit is lost | One of more of the following options, among other options, might be suitable:Option 1: a BFee shall not transmit any response if it would not fit in the remaining TXNAV duration (from the Duration field(s) of the frame(s) transmitted by the BFer), suitably selecting the grouping, codebook and (for SU) Nc. If no combination will fit, then the BFee shall send a "null" beamforming report. If this won't fit, then the BFee shall not transmit any responseOption 2: same as option 1 but just a "should use grouping etc. to make it fit"Option 3: the BFer shall use the BFee's BF response history to determine what request is likely to result in a response which fits (a bit wooly!)Option 4: the BFer shall, unless the duration estimate is such that the TXOP Limit cannot be violated, only do BF frame exchanges (NDPA NDP VCB [BRP VCB]\*) at the start of a TXOP and shall not transmit a frame if the TXOP Limit has been violated (e.g. need to do the [BRP VCB] in a subsequent TXOP)Option 5: the BFee shall not choose MCS/grouping/codebook/Nc which would result in a duration greater than that which the BFee would estimate (based on the 8.2.5.2 rules)Note the resolution to CID 6448 failed to address this, as it focused on the BFer behaviour, but it is the BFee behaviour which is the topic here |

**Proposed Resolution:**

Rejected. This comment was already addressed in LB188, where the BFee behavior is addressed when referring to the responder.

(LB188 CID6448 - REJECTED (MU: 2012-09-18 15:09:20Z): Existing baseline indicates that responder is not responsible for correctness of TXOP limits; baseline also enables transmitter to do smart adaptation of the NAV settings based on the expected response; baseline also allows BFer to set a conservative NAV and cancel it. Implementation should choose the preferred approach.)

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| **CID** | **Comment** | **Proposed Change** |
| 7364 | PCPs and IBSS STAs have sometimes been forgotten in the new P/PC/OC stuff | A proposal will be brought to effect this, based on 12/1037r4 |

**Proposed Resolution:**

Rejected. The comment needs a presentation and discussion to make progress but no presentation made; commenter is invited to submit a comment and bring a presentation.

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| **CID** | **Comment** | **Proposed Change** |
| 7388 | Some things with bandwidth selection could do with being clarified, but this margin is too small to hold them | One or more submissions will be made to address these issues |

**Proposed Resolution:**

Rejected. The comment needs a presentation and discussion to make progress but no presentation made; commenter is invited to submit a comment and bring a presentation.

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| **CID** | **Comment** | **Proposed Change** |
| 7326 | A few places don't seem to require the signalled bandwith to match the actual bandwidth:- non-HT (including duplicate) CTS response to dynamic RTS (9.3.2.6)- non-CTS response to non-HT (including duplicate) signalling control (9.7.6.6) | Remove the "shall set the TXVECTOR parameters CH\_BANDWIDTH\_IN\_NON\_HT and CH\_BANDWIDTH to the same value"s scattered around the place and make a global statement to that effect |

**Proposed Resolution:**

Reject. The requirement for the CTS bandwidth is in 9.3.2.6 (CTS and DMG CTS) procedure:

"The CTS frame's TXVECTOR parameters CH\_BANDWIDTH and CH\_BANDWIDTH\_IN\_NON\_HT shall be set to the same value as the RTS frame's RXVECTOR parameter CH\_BANDWIDTH\_IN\_NON\_HT."

Non-CTS response frames do not signal BW and therefore do not require the related statement.