IEEE P802.11  
Wireless LANs

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| No BRP setup phase without MID and BC | | | | |
| Date: 2019-09-17 | | | | |
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CID 2084 - clarify there is no BRP setup subphase without MID and BC.

Edits are relative to draft 2.4.

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| CID 2084  P2004L47  (drat 2.0) | Third paragraph says "The BRP setup subphase may be skipped if the BRP follows an SSW-Ack frame and no MID or BC subphases were requested during the SLS."  Related, Section 10.43.3.2 lists the cases BRP setup subphase is required as follows, "The BRP setup subphase shall be used in the following two cases: -- When the RSS part of the SLS phase occurred in an A-BFT, in which case the SSW-Ack frame was not part of the SLS. -- When the initiator set the MID-REQ or BC-REQ fields in the SSW-Feedback frame to 1 or the responder set the MID-REQ or BC-REQ fields in the SSW-Ack frame to 1."  Comments:  - It seems BRP setup subphase is not needed (can be skipped) when MID and BC are not used, regardless of whether BRP follows an SSW-Ack frame or not.  -- The first bullet mentioned above [P2006L32] requires BRP after RSS in A-BFT, regardless of whether MID or BC is requested or not, which doesn't seem correct. | Suggested edits below (outline); the word "intent" means setup subphase can also be used without a corresponding request for MID or BC.  ---  Change the first sentence in third pragraph to "The BRP setup subphase is required if there is a request or intent to run MID or BC subphases."  Change the second paragraph in 10.43.3.2 to "The BRP setup subphase shall be used when BRP follows an SLS phase, and the initiator sets the MID-REQ or BC-REQ fields in the SSW-Feedback frame to 1 or the  responder sets the MID-REQ or BC-REQ fields in the SSW-Ack frame to 1. The BRP setup subphase may also be used as part of BRP phase, independent of a preceding SLS phase." |

**Discussion:** Agree in principle; BRP protocol can include a setup subphase regardless of the preceding SLS (if any), and setup subphase is required when MID, BC or both subphases are run.

**10.43.3 Beam Refinement Protocol (BRP) phase**

**10.43.3.1 General**

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The BRP setup subphase may be skipped if the BRP does not include a MID or BC subphase. MID and BC subphases can be skipped if either STA indicates that the subphase is not needed by setting the MID-REQ and BC-REQ fields to 0 or by setting the MIDGrant and BC-Grant fields to 0. The beam refinement transaction can be skipped if both sides indicate that the transaction is not needed by setting the L-RX and TX-TRN-REQ fields to 0.

**10.43.3.2 BRP setup subphase**

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The BRP setup subphase shall be used in the following cases:

— When the RSS part of the SLS phase occurred in an A-BFT, in which case the SSW-Ack frame was

not part of the SLS.

— When the initiator set the MID-REQ or BC-REQ fields in the SSW-Feedback frame to 1 or the

responder set the MID-REQ or BC-REQ fields in the SSW-Ack frame to 1.

— When the initiator intends to include MID or BC or both subphases, independent of a preceding SLS phase.