IEEE P802.11
Wireless LANs

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| LB188 Clause 10.40 Comment Resolution |
| Date: 2012-07-09 |
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Abstract

This submission includes proposed resolutions for CIDs, 6146, 6147, 6310, 6311, 6627, 6628, 6629.

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| 6146 | 164.04 | 10.40 | This is not right. Per the sentence, the AP can assign the same user position 1 for group3 to STA3, STA4 and STA5. | Change the text to "An AP can assign the same user position for different Group ID to different STAs." |

Proposed Resolution: Rejected

Context:

*From 10.40*

“A STA shall have only one user position in each group of which it is a member. The STA’s user position in each group of which it is a member is indicated by the associated subfield in the User Position Array field (see 8.4.1.52

(User Position Array field)) in the Group ID Management frame addressed to the STA. **An AP can assign the same user position for each Group ID to different STAs**.”

Discussion:

While the comment rightly describes the intention of the highlighted, the text proposed by the commenter doesn’t accurately reflect the comment. The proposed text allows same user position, say position 3, to be assigned for different Group IDs, say 2,10,16,..etc, to different STAs, which is not the intention of the highlighted sentence.

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| 6147 | 164.19 | 10.40 | An AP of course can transmit a MU PPDU to a STA before the transmission of a new Group ID Management frame to a STA and any associated acknowledgement from theSTA per the old Group ID management frame. | Change to "Transmission of a Group ID Management frame to a STA and any associated acknowledgement from the STA shall be complete before the transmission of an MU PPDU per the Group defined by the Group ID Management frame to the STA." |

Proposed Resolution: Rejected

Context:

From 10.40

“Transmission of a Group ID Management frame to a STA and any associated acknowledgement from the STA shall be complete before the transmission of an MU PPDU to the STA.”

Discussion: The paragraph describes the order of events, i.e. distribute Group ID information before frame transmission. It doesn’t describe old or recent Group ID assignment. The commnetr proposes to add “per the Group defined by the Group ID Management frame “ to the sentence. The proposed additional text doesn’t seem to add any new information or make the behavior any clear.

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| 6310 | 164.15 | 10.40 | This section should also address LISTEN\_TO\_GID00, LISTEN\_TO\_GID63. | As in comment |

Proposed resolution: Revised

Context:

“A STA that receives a Group ID Management frame with a RA matching its MAC address shall update PHYCONFIG\_VECTOR parameter GROUP\_ID\_MANAGEMENT based on the content of the received Group ID Management frame.”

Discussion:

A STA that receives a Group ID Management frame with a RA matching its MAC address shall update PHYCONFIG\_VECTOR parameter GROUP\_ID\_MANAGEMENT based on the content of the received Group ID Management frame. Group ID values of 0 and 63 are reserved for SU PPDU and are indicated in the PHYCONFIG\_VECTOR by LIISTEN\_TO\_GID00 and LISTEN\_TO\_GID63 parameters.

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| 6311 | 164.15 | 10.40 | No MAC section tells the MAC how and when to populate PHYCONFIG\_VECTOR parameter PARTIAL\_AID\_LIST | Add details on MAC behavior for this |

Proposed Resolution: Revised

Context:

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| * Vector descriptions
 |
| Parameter | Associate vector | Value |
| GROUP\_ID\_MANAGEMENT(#5056) | PHYCONFIG\_VECTOR | The GROUP\_ID\_MANAGEMENT parameter specifies membership status and STA position for each of the group IDs(#4829) as described(#5056) in 8.5.23.3 (Group ID Management frame format) |
| PARTIAL\_AID\_LIST(#5056) | PHYCONFIG\_VECTOR | The PARTIAL\_AID\_LIST parameter includes the list of partial AIDs that the STA is an intended recipient of on its BSS, mesh and TDLS interfaces. The settings of the(#5056) PARTIAL\_AID are specified in 9.17a (Group ID and partial AID in VHT PPDUs)). |
| LISTEN\_TO\_GID00 | PHYCONFIG\_VECTOR | Indicates to the PHY to detect PPDUs with GROUP\_ID field equal to the value 0.(#4094) |
| LISTEN\_TO\_GID63 | PHYCONFIG\_VECTOR | Indicates to the PHY to detect PPDUs with GROUP\_ID field equal to the value 63.(#4094) |

Discussion:

The commenter is correct. The PARTIAL\_AID\_LIST parameter never mentioned anywhere else in the draft.

Proposed Resolution: Revised

Add the following text to Cluase 9.17a

A STA shall set the PARTIAL\_AID\_LIST parameter of the PHYCONFIG\_VECTOR to values computed in Table 9-19.

A STA that transmits a VHT PPDU to a DLS or TDLS peer STA obtains the AID for the peer STA from the DLS Setup Request, DLS Setup Response, TDLS Setup Request or TDLS Setup Response frame.

An AP should not assign an AID to a STA that results in the PARTIAL\_AID value, as computed using Equation (9-8a), being equal to 0.

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| 6627 | 164.01 | 10.40 | These sentences should be reversed. Introduce user position and its relation to User Position Array field. Then state normative requirement of one position per group. Also, a nomative statement may not be necessary since the encoding constraints limit the STA to one user position per group ID. | "A STA's user position in each group.. to the STA. An AP can assign the same user position.. to different STAs. A STA shall have only one user position in each group of which it is a member." |

Proposed Resolution: Accepted

Context: Clause 10.40

Discussion: The Editor seems to have a plan for suffling sentences of the first three paragraphs of Clause 10.40.

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| 6628 | 164.14 | 10.40 | The STA needs to re-issue the PHYCONFIG\_VECTOR, not update it | "shall issue a PHYCONFIG\_VECTOR primitive with the GROUP\_ID\_MANAGEMENT parameter based on the content.." |

Proposed Resolution: Accepted

Context:

A STA that receives a Group ID Management frame with a RA matching its MAC address shall **update** PHYCONFIG\_VECTOR parameter GROUP\_ID\_MANAGEMENT based on the content of the received Group ID Management frame.

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| 6629 | 164.19 | 10.4 | The requirement in this and the next paragraph are meaningless unless tied to the content of the Group ID Management frame. I can send a empty Group ID Management frame and then start sending MU PPDUs. The STA wont receive them because it is does not recognize the group ID. Simply sending a STA a Group ID Management frame doesn't mean its going to be able to demodulate an MU PPDU. SImilarly, in the last paragraph "based on" is vague and thus meaningless. | Delete both paragraphs |

Proposed Resolution: Revised

Context:

STA that receives a Group ID Management frame with a RA matching its MAC address shall update PHYCONFIG\_VECTOR parameter GROUP\_ID\_MANAGEMENT based on the content of the received Group ID Management frame.

**Transmission of a Group ID Management frame to a STA and any associated acknowledgement from the STA shall be complete before the transmission of an MU PPDU to the STA.**

**An MU PPDU shall be transmitted to a STA based on the content of the Group ID Management frame most recently transmitted to the STA and for which an acknowledgement was received.**

Discussion:

The first paragraph seems to have some value in implying that a STA needs to have valid Group ID and User Position before being able to receive a downlink MU PPDU. The seconf paragraph can be deleted as suggested by the commenter.

Proposed Changes

STA that receives a Group ID Management frame with a RA matching its MAC address shall update PHYCONFIG\_VECTOR parameter GROUP\_ID\_MANAGEMENT based on the content of the received Group ID Management frame.

Transmission of a Group ID Management frame, carrying a valid Group ID and a valid User Position, to a STA and any associated acknowledgement from the STA shall be complete before the transmission of an MU PPDU to the STA.

**References:**