IEEE P802.11
Wireless LANs

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| Resolutions for CC34 CIDs for More Data usage |
| Date: 2021-02-08 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Laurent Cariou |  |  |  | laurent.cariou@intel.com |

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| **CID** | **Commenter** | **Clause Number(C)** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 1195 | Arik Klein | 35.3.6.1.5 | 134.23 | Need to change the language in the following text: "When an AP MLD transmits a PPDU carrying a BU in one enabled link to a non-AP MLD...".The AP MLD does not transmit any PPDU, but only any of its affiliated APs. Similarly, the non-AP MLD does not transmit any PPDU but rather any of its affiliated non-AP STAs | Revise the sentence as follows: "When an AP affiliated with AP MLD transmits a PPDU carrying a BU in one enabled link to its associated STA affiliated with a non-AP MLD...." |  Revised – agree with the commenter. Apply the changes marked as #1195 in this document. |
| 1444 | Chunyu Hu | 35.3.6.1.5 | 134.21 | More Data subfield is used by the AP in frames to a STA in PS mode in the baseline. When extending to the MLD case, if none of STAs affiliated to the MLD is in PS mode, then More Data field should not be required to set to 1 but this subclause doesn't mentioned any PS mode and states otherwise. | See comments |  Revised – agree with the commenter. Apply the changes marked as #1444 in this document. |
| 1882 | Jarkko Kneckt | 35.3.6.1.5 | 134.23 | The More Data frame value 1 is traditionally used only for STAs in power save mode. | Please clarify whether the More Data bit is maintained for active mode and power save mode STAs. Please clarify in which link the power save mode is tracked. |  Revised – agree with the commenter. Apply the changes marked as #1882 in this document. |
| 2516 | Pooya Monajemi | 35.3.6.1.5 | 134.23 | Setting a more data bit as described in this sentence requires instantaneous information about the state of other links and may not be accurate | Change shall to should |  Rejected – if we want to preserve the functionality of the More Data field, it has to be a “shall” statement.  |
| 3379 | Zhou Lan | 35.3.6.1.5 | 134.20 | The rule for setting the More Data subfield is related with the EOSP and TIM setting. Add the related rules. | As stated in the comment |  Revised – it seems that the EOSP rules are orthogonal and are kept per link in 11be. But the rules for More Data and relationship to TIM setting needs to be clarified. Apply the changes marked as #3379 in this document. |
| 1497 | Dibakar Das | 35.3.6.15 | 134.23 | The AP should also be able to use More Data fields in the BA or Multi-STA BA to signal it has pending data for any TID that is mapped to this link. | Clarify the usage of More Data field in BA or Multi-STA BA when transmitted by a STA affiliated with an MLD. |  Revised – agree with the commenter. Apply the changes marked as #1497 in this document. |
| 1001 | Abhishek Patil | 9.2 | 51.04 | Spec needs to clarify the usage of More Data subfield (9.2.4.1.8) and EOSP subfield (9.2.4.5.3) with and without when TID mapping is negotiated. | Update the description in 9.2.4.18 and 9.2.4.5.3 to be consistent with 35.3.6.1.5 |  Revised – agree with the commenter. Change 9.2.4.1.8 according to 35.3.6.1.5. Apply the changes marked as #1001 in this document. |

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.

***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**

The baseline for this text is 802.11ax 8.0 and REVmd D4.0

20 **35.3.6.1.5 Use of More Data subfield by an MLD**

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 ***TGbe editor: Change following paragraph as follows (#1195, #1444, #1882):***

An AP affiliated with an AP MLD uses the More Data subfield as defined in 9.2.1.4.8 to indicate to a non-AP STA in PS mode affiliated with the non-AP MLD that more individually addressed BUs are buffered for that non-AP MLD. The indicated buffered BUs (not including the BU currently being transmitted) are buffered at the AP MLD for the non-AP MLD and correspond to Data frames with TIDs that are mapped to this link by the most recent DL TID-to-link mapping (negotiated TID-to-link mapping or default mode mapping, see 35.3.6.1 (TID-to-link mapping)) or Management frames that are not measurement MMPDUs (see 35.3.10.4 Traffic indication).

An AP affiliated with an AP MLD shall follow the procedure defined in 11.2.3.6 (AP operation) for setting the More Data subfield and the EOSP subfield, except that in individually addressed frames the More Data subfield is used to indicate the presence of more BUs at the AP MLD for a non-AP MLD, as defined above.

When a STA that is affiliated with a non-AP MLD operating with default mapping (see 35.3.6.1.2 (default mapping mode) receives an individually addressed MPDU from its associated AP affiliated with the associated AP MLD with the More Data subfield set to 1, then at least one of any non-AP STA affiliated with the non-AP MLD shall follow the procedures defined in 11.2.3.7 (Receive operation for STAs in PS mode) and 11.2.3.8 (Receive operation using APSD) and may send PS-Poll frames or UAPSD trigger frames to retrieve buffered BUs buffered at the AP MLD.

When a STA that is affiliated with a non-AP MLD operating with a negotiated non-default TID-to-link mapping (see 35.3.6.1.3 (Negotiation of TID-to-link mapping) receives an individually addressed MPDU from its associated AP with the More Data subfield set to 1, then at least one of any STA affiliated with the non-AP MLD that is operating on a link that is mapped to any of the TIDs that is also mapped to the link on which the individually addressed MPDU with the more data bit set to 1 is sent (as specified by the most recent DL TID-To-Link mapping) shall follow the procedures defined in 11.2.3.7 (Receive operation for STAs in PS mode) and 11.2.3.8 (Receive operation using APSD) and may send PS-Poll frames or UAPSD trigger frames with any TID that is mapped to this operating link to retrieve the buffered BUs buffered at the AP MLD.

**9.2.4.1.8 More Data subfield**

***TGbe editor: Change paragraphs 2 as follows (from REVmd)*** #1497, #3379, 1001)***:***

A non-DMG and non-S1G(11ah) STA uses the More Data subfield to indicate to a STA in PS mode that more BUs are buffered for that STA at the AP. The More Data subfield is valid in individually addressed Data or Management frames transmitted by an AP to a STA in PS mode. (MDR2)The More Data subfield is set to 1 to indicate that at least one additional buffered BU is present for the same STA(#2262) (see 11.2.3.6 (AP operation)).

For a non-AP MLD, an AP affiliated with an AP MLD uses the More Data subfield to indicate to a non-AP STA in PS mode affiliated with the non-AP MLD that more BUs, corresponding to Data frames with TIDs that are mapped to this link by the most recent DL TID-to-link mapping (negotiated TID-to-link mapping or default mode mapping, see 35.3.6.1 (TID-to-link mapping)) or Management frames that are not measurement MMPDUs (see 35.3.10.4 Traffic indication) are buffered for the non-AP MLD at the AP MLD (see 35.3.6.1.5 (Use of More Data subfield by an MLD)). The More Data subfield is valid in individually addressed Data or Management frames transmitted by an AP affiliated to an AP MLD to a STA affiliated to a non-AP MLD that is in PS mode and in certain control frames as defined below.

***TGbe editor: Change the following paragraphs as follows (from 11ax D8.0)*** #1497, #3379, 1001)***:***

An AP optionally sets the More Data subfield to 1 in Ack frames sent to a non-DMG non-S1G non-HE STA and in Ack, BlockAck and Multi-STA BlockAck frames sent to an HE STA. An HE AP indicates that it supports setting the More Data subfield to 1 in these control response frames by setting the More Data Ack subfield to 1 in the QoS Info field of elements it includes in frames transmitted to the STA.

The AP can set the More Data subfield to 1 to indicate that it has a pending transmission for the STA or, if the AP is affiliated with an AP MLD, to indicate that the AP MLD has additional buffered BUs corresponding to frames with TIDs that are mapped to the link on which the AP operates by the most recent DL TID-to-link mapping (negotiated TID-to-link mapping or default mode mapping, see 35.3.6.1 (TID-to-link mapping)) or Management frames that are not measurement MMPDUs (see 35.3.10.4 Traffic indication) for the non-AP MLD with which the STA is affiliated, if it has received a frame that contains a QoS Info field in which the More Data Ack subfield is equal to 1 from the STA and one of the following conditions is true:

***TGbe editor: End of Change***