IEEE P802.11  
Wireless LANs

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| LB230 CR CID 13870 | | | | |
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Abstract

This submission proposes resolutions of comments received from TGax LB230.

(The proposed change is based on TGax Draft 2.2.)

* CIDs: 13870 (1 CIDs)

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 TGax Draft. This introduction is not part of the adopted material.

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

***TGax Editor: Editing instructions preceded by “TGax Editor” are instructions to the TGax editor to modify existing material in the TGax draft. As a result of adopting the changes, the TGax editor will execute the instructions rather than copy them to the TGax Draft.***

| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| --- | --- | --- | --- | --- | --- |
| 13870 | 124.01 | 9.4.2.168 | Table 9-258 (Format And Bandwidth field) in the Fine Timing Measurement Parameters element have to include the HE PPDU format. Also update the related behavior for 11.24.6 (Fine timing measurement (FTM) procedure). | As in comment. | Revised-  Agree in principle.  Table for indicating the format and bandwidth in the fine timing measurement procedure negotiation is updated for using an HE PPDU format.  The related behaviour is also updated.  For example,  i) The responding STA shall not indicate an HE format if VHT, DMG, HT-mixed or non-HT format was requested.  ii) In a baseline spec (802.11 REVmd 1.0), since a FTM frame and its ACK response use the same bandwidth, the HE TB PPDU carrying the ACK response also follow the same rule.  TGax editor makes changes as shown in the as specified in 11-18/0602r0. |

***TGax editor: change the Table 9-272 as the following:***

**Table 9-272— Format And Bandwidth field**

|  |  |  |
| --- | --- | --- |
| **Field value** | **Format** | **Bandwidth (MHz)** |
| 17 | HE | 20 |
| 18 | HE | 40 |
| 19 | HE | 80 |
| 20 | HE | 80+80 |
| 21 | HE (two separate RF Los) | 160 |
| 22 | HE (single RF LO) | 160 |
| 23~~17~~-30 | Reserved | Reserved |

***TGax editor: change 11.24.6.3 as the following (renumbing the subclause number based on 802.11REVmd 1.0):***

**11.~~24~~22.6.3 Fine timing measurement procedure negotiation**

The initiating STA shall indicate, in the Format and Bandwidth field, a format and bandwidth that it supports. The responding STA shall indicate, in the Format and Bandwidth field, a format and bandwidth that it supports. The responding STA should indicate the same format and bandwidth in the Format and Bandwidth field as that requested by the initiating STA, if the responding STA supports this. The responding STA shall not indicate a bandwidth wider than requested. The responding STA shall not indicate an HE format if VHT, DMG, HT-mixed or non-HT format was requested. The responding STA shall not indicate a VHT format if DMG, HT-mixed or non-HT format was requested. The responding STA shall not indicate an HT format if DMG or non-HT format was requested. The responding STA shall not indicate a DMG format if HE, VHT, HT-mixed or non-HT format was requested.

If the request was successful

— The initiating STA shall indicate, in the Format and Bandwidth field, a format and bandwidth it supports. The responding STA shall indicate, in the Format and Bandwidth field, a format and bandwidth that it supports. The responding STA should indicate the same format and bandwidth in the Format and Bandwidth field as that requested by the initiating STA, if the responding STA supports this. The responding STA shall not indicate a bandwidth wider than requested. The responding STA shall not indicate an HE format if VHT, DMG, HT-mixed or non-HT format was requested. The responding STA shall not indicate a VHT format if DMG, HT-mixed or non-HT format was requested. The responding STA shall not indicate a DMG format if HE, VHT, HT-mixed or non-HT format was requested.

***TGax editor: change 11.24.6.4 as the following (renumbing the subclause number based on 802.11REVmd 1.0):***

**11.~~24~~22.6.4 Measurement exchange**

For the Fine Timing Measurement frames transmitted during the FTM session:

— The responding STA shall not use a bandwidth wider than that indicated by the STA in the initial Fine Timing Measurement frame.

— The responding STA shall not use an HE format if the STA indicated VHT or HT-mixed or non-HT format in the initial Fine Timing Measurement frame.

— The responding STA shall not use an RU less than 242-tone and shall allocate the RU size of the solicited ACK frame to be same as the RU size carrying the soliciting Fine Timing Measurement frame if the STA uses an HE MU PPDU format.

— The responding STA shall not use a VHT format if the STA indicated HT-mixed or non-HT format in the initial Fine Timing Measurement frame.

— The responding STA shall not use an HT format if the STA indicated non-HT format in the initial Fine Timing Measurement frame.