IEEE P802.11  
Wireless LANs

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| 11az LB240 Comment Resolution Section 11.22.6.4.3.4 | | | | |
| Date: 2019-04-03 | | | | |
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Abstract

This submission proposes the comment resolution of CIDs in LB240 related to section 11.22.6.4.3.4

Revisions:

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 TGaz Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

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

**The text preceded by “Discussion” is not part of the adopted changes.**

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| **CID** | **P.L** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 1343 | 108.24 | 11.22.6.4.3.4 | In Fig 11-36h, why don't leverage the existing 11ax TB sounding sequnce and have the trigger for ranging report immeidately after the DL NDP | as in the comment | **Revised**  The TB Ranging sequence is different from the 11ax TB sounding sequence; it consists of both UL and DL sounding. Accordingly, the feedback consists of AP-to-STA feedback and optionally STA-to-AP feedback. The sequence including the STA-to-AP reporting is an extension of the basic TB ranging sequence.  As a result the trigger for ranging report cannot follow immediately the DL NDP.  The first frame, the RSTA-to-ISTA LMR, is a DL frame, while the trigger is used to collect the ISTA-to-RSTA LMR in MU-OFDMA UL traffic.  Modify the figure, to make DL/UL direction of frames clearer. |
| 1474 | 100.03 | 11.22.6.4.3.4 | The reference "11.22.6.4.3" is incorrect. Change it to 11.22.6.4.3.3 | As in comment | **Accepted** |
| 2175 | 57.10 | 11.22.6.4.3.4 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed. References are to the CC draft and hence may be wrong against D1.0.] "and if negotiate from ISTA to RSTA" -- what does this mean? | Clarify | **Rejected**  See first paragraph of new text: “LMR frames shall carry measurement results from the RSTA to the ISTA, and if negotiated also from the ISTA to the RSTA” and compare Fig 11-36h |
| 2176 | 57.15 | 11.22.6.4.3.4 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed. References are to the CC draft and hence may be wrong against D1.0.] "the successive availability window that includes medium allocation for sounding to the ISTA" -- how does this work for the last set of results? There will be no sounding phase for those | Clarify | **Rejected**  Now rewritten as “delayed (i.e., from the last availability window in which the ISTA responded to the TF Ranging Poll and the RSTA allocated resources to that ISTA during the measurement sounding part)”.  And yes, if it is delayed feedback, you’ll never get the last measurement (assuming you even know that this will be your last). |
| 2180 | 57.20 | 11.22.6.4.3.4 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed. References are to the CC draft and hence may be wrong against D1.0.] "the ISTA shall response with the ISTA-to-RSTA LMR using the HE TB PPUD format" -- this is normal TF behaviour so need not be stated | Delete | **Rejected**  Now rewritten as “In response to the TF, each addressed ISTA shall respond by transmitting an ISTA-to-RSTA LMR frame”. |
| 2181 | 57.20 | 11.22.6.4.3.4 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed. References are to the CC draft and hence may be wrong against D1.0.] Should also illustrate the case with no ISTA-to-RSTA | Add a figure, or say it is the same as the figure except no TF and no UL | **Rejected**  I’m assuming here, that this comments refers to “no ISTA-to-RSTA” LMR(?)  See figures 11-36d and 11-36e, which habe the polling and measurement souding parts in full detail (different from 11-36h), but feature RSTA-to-ISTA LMR only. |
| 2182 | 57.00 | 11.22.6.4.3.4 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed. References are to the CC draft and hence may be wrong against D1.0.] What if not all the reports to the ISTAs can be fitted into a single DL MU PPDU? | Clarify how this is handled | **Rejected**  This case does not exist, since any STA that was allocated UL resources during the measurement sounding part, needs to have sent a CTS-to-self in the polling part. Since the maximum number or RU allocatioins in the polling limits the number of ISTA, there will always be enough RU allocations in the DL MU PPDU for LMR too. |
| 2183 | 57.00 | 11.22.6.4.3.4 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed. References are to the CC draft and hence may be wrong against D1.0.] What if not all the reports from the ISTAs can be fitted into a single TF response? | Clarify how this is handled | **Rejected**  See explanation for #2182. Same number oF RU allocations. |
| 2184 | 57.00 | 11.22.6.4.3.4 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed. References are to the CC draft and hence may be wrong against D1.0.] What if not all the reports from the ISTAs are received by the RSTA? | Clarify how this is handled | **Rejected**  As stated “Each LMR is a unicast frame. It is carried in Action No Ack frames (see 9.6.7.37) and are therefore neither acknowledged nor retransmitted.”, therefore any lost frames will translate into lost measurements.  The logic behind this is that a retransmission protocol would not save much compared to simply doing another measurement. |
| 2185 | 57.00 | 11.22.6.4.3.4 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed. References are to the CC draft and hence may be wrong against D1.0.] What if not all the reports to the ISTAs are received by the ISTAs? | Clarify how this is handled | **Rejected**  See explanation for #2084. Same logic. |
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Change the title of 11.22.6.4.3.4 as follows:

11.22.6.4.3.4 Measurement Reporting Part of TB Ranging (#2158)

Change the paragraph as follows:

The Dialog Token field in the LMR frames shall be copied from the Sounding Dialog Token field in the corresponding Ranging NDP Announcement frame which was part of the Measurement Sounding part from which the reported ToA and ToD values were measured (see 11.22.6.4.3.3 Measurement Sounding Part of TB Ranging (#1474)).

Change the paragraph as follows:

All the ISTAs that were allocated resources in the preceding measurement sounding part receive an RSTA-to-ISTA LMR. All the RSTA-to-ISTA LMR frames are carried in one HE MU PPDU; if there is only one RSTA-to-ISTA LMR, it may be carried in an HE SU PPDU. If ISTA-to-RSTA LMR was negotiated, the RSTA shall assign UL resources to the ISTAs using a Trigger frame of variant Ranging, subvariant Report (see subclause 9.3.1.23.9 Ranging Trigger variant). The Ranging Trigger Frame of subvariant Report is called the TF Ranging LMR (#1977).

Change Figure-11-36h as follows (#1343):



Figure 11-36h TB Ranging measurement reporting part with Bidirectional LMR Feedback for n ISTA