IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Delayed Reporting and Valid Measurements | | | | |
| Date: 2020-08-05 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Christian Berger | NXP | 350 Holger Way, San Jose, CA |  | [Christian.berger@nxp.com](mailto:Christian.berger@nxp.com) |
| Jonathan Segev | Intel |  |  | [jonathan.segev@intel.com](mailto:jonathan.segev@intel.com) |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Abstract

This submission proposes to clarify the behaviour in the first LMR for delayed reporting; also noticed that the Invalid Measurement field shoud be a subfield and a figure has a wrong caption.

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.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **P.L** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
|  |  |  |  |  |  |

**9.6.7.48 Location Measurement Report frame format**

TGaz Editor: Rename Figure 9-981a on page 95 as follows

**Figure 9-981a—Location Measurement Report frame (#1856) Action field format**

TGaz Editor: Modify the paragraphs starting on page 96 (line 12) as follows

The Max TOD Error Exponent subfield contains an upper bound for the error exponent in the value specified in the TOD field.

The TOD Not Continuous subfield indicates that the TOD value is with respect to a different underlying time base than the last transmitted TOD value. It is set to 1 when a discontinuity is present. Otherwise, it is set to 0.

The Max TOA Error Exponent subfield contains an upper bound for the error exponent in the value specified in the TOA field.

The Invalid Measurement subfield contains an invalid indication for the TOA field. The Invalid Measurement subfield is set to 1 to indicate that the TOA value is invalid and the value 0 in this field indicates that the TOA value is valid.

The TOA Type subfield indicates if the TOA timestamp was calculated based on the first arrival path of the channel impulse response or the average linear phase across the subcarriers.

A value of 0 for the Max TOD Error Exponent or the Max TOA Error Exponent subfield indicates that the upper bound on the error in the corresponding TOD or TOA value is unknown. A value of 31 indicates that the upper bound on the error is greater than or equal to 1.073 741 824 ms.

**11.22.6.4.3.4 Reporting phase of TB Ranging measurement**

TGaz Editor: Add the following paragraph on page 143 (line 19)

For delayed reporting, the first instances of the R2I LMR and the optional I2R LMR will not have valid TOA/TOD timestamps to include, in this case the RSTA and the ISTA shall set the Invalid Measurement subfield in the TOA Error field of the corresponding LMR to 1.

11.22.6.4.4.3 Non-TB Ranging Measurement Reporting phase

TGaz Editor: Modify the paragraph starting on page 148 (line 20) as follows

An RSTA indicates delayed reporting by setting the Immediate LMR field in the non-TB specific subelement in the Ranging Parameters field to 0. (#2276, #1654, #1220, #2431) In delayed reporting, the TOA and TOD values in the current LMR carry the measurement results of the previous round. In this case, the first instances of the R2I LMR and the optional I2R LMR will not have valid TOA/TOD timestamps to include, and the RSTA and the ISTA shall set the Invalid Measurement subfield in the TOA Error field of the corresponding LMR to 1; see Figure 11-36k (Non-TB Ranging with delayed reporting).

TGaz Editor: Modify Figure 11-36k—Non-TB Ranging with delayed reporting as follows



1. Figure 11-36k—Non-TB Ranging with delayed reporting