IEEE P802.11  
Wireless LANs

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| LB276 CR for Threshold-based Reporting - Part 1 | | | | |
| Date: 2023.09.13 | | | | |
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Abstract

This submission contains the proposed comment resolutions of CIDs in 23/1394 LB276 comments and approved resolutions.

The following CIDs related to the threshold-based reporting are resolved:

All the related CIDs in Clause 9: 3017, 3066, 3150, 3360, 3361

Some CIDs in Clause 11: 3365, 3366

Revision Notes

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| R0 | Initial revision |

## CIDs 3017, 3150, 3360, and 3361

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| CID | Page.  Line | Clause Number | Comment | Proposed Change | Resolution |
| 3017 | 54.47 | 9.4.1.73.4 | The 2nd row and 3rd column of Table 9-127i (CSI Variation Feedback field), should be deleted since the CSI variation feedback field is not present when the Invalid Indication field is set to 1. | Delete the 2nd row and 3rd column of Table 9-127i (CSI Variation Feedback field) | REVISED.  Agree with the commenter in principle.  ***Instructions to the editor:***  **Please make the changes as shown under CID 3361 in 11-23/1592r0.** |
| 3150 | 54.18 | 9.4.1.73.3 | Change "The value equal to 15 indicates that the CSI variation feedback is not used and the  corresponding frame is used for the feedback of  sensing measurement result transmitted in the  measurement reporting phase of the threshold based reporting phase or in the basic reporting phase." to | The value equal to 15 indicates that the CSI  variation feedback is not reported and instead the corresponding frame provides feedback of sensing measurement result during the threshold based reporting phase or the basic reporting phase. | REVISED.  Agree with the commenter in principle.  ***Instructions to the editor:***  **Please make the changes as shown under CID 3361 in 11-23/1592r0.** |
| 3360 | 55.01 | 9.4.1.73.3 | "CSI variation value" is still undefined. After the previous LB, the TG has apparently confirmed that they want to leave this implementation specific. However, for this mechanism to work, a common understanding is needed between initiator and responder. Some form of definition is needed. At the minimum, the initiator needs to be able to develop some understanding of the responder's values. | Either define "CSI variation" or optionally include the CSI variation value relative to the previous feedback in Basic reporting, such that calibration/training becomes feasible. | REJECTED.  This comment is more related to a detailed implementation which is already allowed to some extent: To let the initiator have a common understanding of the responder’s values, the initiator can implement the threshold-based reporting to get the relation between the CSIs and the corresponding feedback values in a convergence period. |
| 3361 | 55.20 | 9.4.1.73.3 | Why is value 10 a "threshold" while values 0-9 are "values". Is this intentional? | Clarify and correct if necessary | REVISED.  Value 10 should correspond to a CSI variation value, instead of a threshold. This is a typo.  ***Instructions to the editor:***  **Please make the changes as shown under CID 3361 in 11-23/1592r0.** |

***Instructions to the editor: please make the following changes to Page 54, Line 18 in the subclause 9.4.1.73.3 (Sensing Measurement Report Control field) in 802.11bf D2.0 as shown below:***

The value between 0 and 10 reflects the CSI variation value obtained by the sensing receiver in the case of the Invalid Indication field set to 0, and indicates an invalid CSI variation feedback in the case of the Invalid Indication field set to 1. The above values are used for the feedback of CSI variation triggered by the Sensing Threshold-based Reporting Trigger frame. In this case, the Remaining Report Segments field is set to 0 to indicate this is the last segment with no Sensing Measurement Report Control and Sensing Measurement Report fields within the frame.

The value equal to 15 indicates that the CSI variation feedback is not reported and instead the corresponding frame provides the feedback of sensing measurement result during the threshold based reporting phase or the basic reporting phase. (#3150)

See Table 9-127i (CSI Variation Feedback field).

***Instructions to the editor: please make the following changes to Page 54, Line 47 in the subclause 9.4.1.73.3 (Sensing Measurement Report Control field) in 802.11bf D2.0 as shown below:***

|  |  |  |
| --- | --- | --- |
| * CSI Variation Feedback field | | |
| Value | Description | |
| (#3017) |  |
| 0 | 0 ≤ CSI variation value < 0.1 |  |
| 1 | 0.1 ≤ CSI variation value < 0.2 |
| 2 | 0.2 ≤ CSI variation value < 0.3 |
| 3 | 0.3 ≤ CSI variation value < 0.4 |
| 4 | 0.4 ≤ CSI variation value < 0.5 |
| 5 | 0.5 ≤ CSI variation value < 0.6 |
| 6 | 0.6 ≤ CSI variation value < 0.7 |
| 7 | 0.7 ≤ CSI variation value < 0.8 |
| 8 | 0.8 ≤ CSI variation value < 0.9 |
| 9 | 0.9 ≤ CSI variation value < 1.0 |
| 10 | CSI variation value (#3361) = 1 |
| 11-14 | Reserved | |
| 15 | Basic reporting (CSI variation feedback is not used) | |

## CIDs 3066

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| CID | Page.  Line | Clause Number | Comment | Proposed Change | Resolution |
| 3066 | 74.34 | 9.4.2.320 | "Reserved" might be confused with 11-14 in the table. | Change "Reserved" to "reserved" (lowercase). | ACCEPTED. |

Discussion:

The CSI Variation Threshold field is Reserved if the Sensing Receiver field within the Sensing Measurement Parameters field of the same frame is set to 0. Otherwise, the CSI Variation Threshold field values are defined in Table 9-401u (CSI Variation Threshold field definition).

## CIDs 3365 and 3366

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| --- | --- | --- | --- | --- | --- |
| CID | Page.  Line | Clause Number | Comment | Proposed Change | Resolution |
| 3365 | 154.08 | 11.55.1.5.2.6.2 | Figure 11-75h uses naming like "Sensing TH-based Reporting Trigger" and "Sensing Reporting Trigger". Other figures use the term "Trigger Frame" | Replace "Trigger" with "Trigger frame" | REVISED.  Agree with the commenter in principle. To be consistent, the “Sensing Measurement Report” is also changed into “Sensing Measurement Report frame” in the same figure.  ***Instructions to the editor:***  **Please make the changes as shown under CID 3366 in 11-23/1592r0.** |
| 3366 | 154.15 | 11.55.1.5.2.6.2 | In Figure 11-75h, it looks like the "Threshold-based reporting phase" contains both TH-based and regular reporting. | Should there be two phases? | REJECTED.  This comment is rejected because it is a question. In addition, two subphases are needed here because sometimes the second subphase may not exist. The use of two subphases makes the description clearer. |

***Instructions to the editor: please make the following changes to Page 154, Line 08 in the subclause (11.55.1.5.2.6.2 Threshold-based reporting phase) in 802.11bf D2.0 as shown below (#3365):***



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