IEEE P802.11
Wireless LANs

|  |
| --- |
| Proposed resolutions for comments on D4.0 |
| Date: 2024-05-06 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Claudio da Silva | Meta Platforms |  |  |  |
| Tony Xiao Han | Huawei |  |  |  |
| Stephen McCann | Huawei |  |  |  |

Abstract

This document contains proposed resolutions for comments on D4.0 (LB285).

CIDs: 5007, 5008, 5009, 5010, 5011

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page** | **Comment** | **Proposed change** |
| 5007 | 11.55.1.4.1 | 142.60 | Missing spacing in "bereserved" | Change "bereserved" to "be reserved" |

**Proposed resolution**: Rejected

**Discussion**: An IEEE-SA professional editor edits the document.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page** | **Comment** | **Proposed change** |
| 5008 |  |  | Frame sequences for exchange are required. Note that 802.11 moved from specifying the frame sequences in clause 10.23.2 HCF Contention based channel access (EDCA) to using Annex G, where both the 11ax and 11az frame sequences are now described along with all other frame sequences. Refer to Annex G.5. | Add the frame sequences to Annex G that are relevant for 11bf, the 11az example can be found in REVme. |

**Proposed resolution**: Rejected

**Discussion**: The comment is out of scope: i.e. it is not on changed text, text affected by changed text or text that is the target of an existing valid unsatisfied comment. It should be noted that Annex G is informative and frame exchanges in this Annex are not required.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page** | **Comment** | **Proposed change** |
| 5009 | 9.4.1.78.4 | 66.05 | "The range of RSSI in Table 9-129r seems not to be enough. All the rx power <-82dBm has been reported as -82dBm.The real product can acheive much better sensitivity for RSSI<-82dBm. And even in 11az, the TargetRSSI is (-110+FVal(8bit)), which can indicate [-110dBm, -20dBm]" | Make the RSSI in CSI Report can be indicated accurate low rx power value (upto -110dBm). e.g, use the same TargetRSSI definition as in 11az |

**Proposed resolution**: Rejected

**Discussion**: The comment is out of scope: i.e. it is not on changed text, text affected by changed text or text that is the target of an existing valid unsatisfied comment.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page** | **Comment** | **Proposed change** |
| 5010 | 9.4.1.78.4 | 147.10 | Some sensing procedures, e.g. NDPA sounding without reporting in a TB exchange, can be used for extracting CSI at the non-AP STA side. Hence a non-AP STA should be allowed to setup a TB session. Currently only an AP can initiate a TB sensing session. SBP is not a feature with equal footing since it is deemed to be optional. A similar comment was unable to receive consensus in the group in the previous LBs hence repeated in this round. | Allow a non-AP STA to initiate a TB sensing session setup with the AP. Note that the non-AP STA doesn't need to send trigger frames. The AP still is the node sending the trigger frames and sensing PPDUs. This will not incur any extra overhead during the measurement phase. A setup procedure similar to SBP can be allowed to request a TB session by the non-AP STA. |

**Proposed resolution**: Rejected

**Discussion**: This comment was addressed in 11-24/0336r0 in response to CID 4294 and was rejected. The technical justification given for the proposed resolution was:

“SBP setup procedure enables a non-AP STA to request AP to establish a TB sensing measurement exchange and have options to either include that non-AP STA in the measurement sequence or not and finally provide the CSI reports from sensing responders acting as sensing receivers to that non-AP STA.

As an another method, non-AP STA can initiate Non-TB sensing measurement exchange and can extract CSI when receiving SR2SI NDP from AP (that is sensing responder) in measurement sounding phase.”

After discussion of the proposed resolution in the Monday AM1 session of the March 2024 meeting, the following SP was conducted: “Do you agree to the resolution provided for following CID 4294, 4297 to be included in the latest 11bf Draft?” As found in the minutes for this meeting (11-24/0624r0), the SP received unanimous support. Corresponding motion was approved with unanimous consent in the Monday PM2 session of the same meeting (as recorded in 11-24/0624r0).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page** | **Comment** | **Proposed change** |
| 5011 | 1.55.2.1 | 147.25 | In TB sensing mode, NDPA sounding which doesn't need reporting cannot be done without a polling phase as described in D4.0. Removing the polling phase requirement can result in a low-power mechanism to do sensing at the non-AP STA side. The polling phase is not needed for each sensing PPDU for the AP to make sure the STA is present during the availability windows. Since there is a requirement for sensing activity every session expiry period, a polling response can be required once every session expiry time period. As long as the AP is aware of the STA's presence (e.g. STA sends at least one sensing frame before the session expiry), the AP can use the sensing setup as a service providing requirement for that duration. A similar comment was unable to receive consensus in the group in the previous LBs hence repeated in this round. | Allow a TB session to consist of only NDPA sounding phase. In order for the AP to make sure the STA is present, a polling response can be required once in measurement session expiry time period. |

**Proposed resolution**: Rejected

**Discussion**: This comment was addressed in 11-24/0555r1 in response to CID 4295 and was rejected. The technical justification given for the proposed resolution was:

“Polling phase is part of the TB sensing measurement exchange and not part of NDPA sounding! Polling phase enables AP not only to verify the presence of the sensing responder during the Sensing Availability Window (S-AVW) as to manage the MS expiry timer, but also to ensure that the assigned resources for NDPA sounding is actually being utilized (a required inquiry for each TB measurement exchange). As commenter might be aware the inclusion of polling phase is AP’s decision regardless of responder’s request. Essentially, spec considers an efficient utilization of NDPA sounding as priority over the responder’s “incremental” power save since responder must already be awake and ready to receive/participate in NDPA sounding not knowing when it would occur.”

After discussion of the proposed resolution in the Tuesday AM1 session of the March 2024 meeting, the following SP was conducted: “Do you support the comment resolutions for CIDs 4285 and 4295 as presented in document 11-24/0555r1?” As found in the minutes for this meeting (11-24/0624r0), the SP had the following result: 19/4/11 (Y/N/A). Corresponding motion was approved with unanimous consent in the Wednesday AM2 session of the same meeting (as recorded in 11-24/0624r0).