IEEE P802.11
Wireless LANs

|  |
| --- |
| Spec Text for CR for CID 915, 1100 and 1132 |
| Date: 2018-11-11 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Xiaofei Wang | InterDigital Inc. | 2 Hungting Quad, Melville, NY 11747USA | +1-607-592-2727 | Xiaofei.wang@interdigital.com |
| Hanqing Lou |  |  |
| Rui Yang |  |  |
| Rojan Chitrakar | Panasonic |  |  |  |

Abstract

This submission proposes resolutions for the following CIDs: 915, 1100 and 1132.The baseline for this comment resolution document is 802.11ba Draft 1.0

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page** | **Line** | **Comment** | **Proposed Change** | **Resolution** |
| 915 | 4.3.15a | 22 | 2 | A WUR non-AP STA that supports reception of WUR PPDU with High Data Rate may fail to receive the WUR frame in bad channel conditions. In such situations, it would be better for the WUR AP to switch to Low Data Rate; however currently there is no mechanism for WUR STAs to provide feedback to the WUR AP. | In the event of CRC or MIC errors during reception of WUR PPDUs carrying WUR frames with High Data Rate addressed to a WUR non-AP STA, add options for the STA to provide feedback to the AP in one of the following two ways:1) As an Event Report e.g. "FCS Error Event"2) As a request to switch to Low Data RateBased on the feedback from the STA, AP can decide to use the more robust LDR for subsequent WUR frames addressed to the STA. | Revised—Instruction to the editor: please make changes included in 11-18/1925r2. |
| 1100 | 9.4.2.273 | 31 | 38 | A non-AP STA should be able to opt to receive a WUR frame at low data rate. High and low data rates are defined in the draft, but a non-AP STA has no remedy if the AP decides to transmit to in high data rate. | add a row on "preferred data rate" in Table 9-318e and the associated procedures so that a non-AP STA can have some remedy if an AP decides to transmit to it using high data rate. Otherwise, there is no point to define a high data rate if high data rate is not being used at all. | Revised—Instruction to the editor: please make changes included in 11-18/1925r2. |
| 1132 | 31.6.1 | 55 | 1 | A WUR non-AP should have a remedy in case the WUR AP chooses to transmit to it using HDR and if HDR doesn't work well as a part of the WUR negotiation process. | Provide a remedy in the WUR negotiation process for WUR non-AP STA to switch to a LDR if HDR doesn't work well for the current channel condition. | Revised—Instruction to the editor: please make changes included in 11-18/1925r2. |

**Discussion: *None***

* WUR Mode element

**TGax Editor: *Change Table 9-318e as follows:***

|  |
| --- |
| * Subfields of the WUR Parameters field from WUR non-AP STA
 |
| **Subfield** | **Definition** | **Encoding** |
| On Duration | Indicates the preferred On Duration that the WURx of the WUR non-AP STA will be in WURx awake state for each the WUR duty cycle schedule (see 31.5 (WUR duty cycle operation)). | The size of the field is 4 bytes. The unit of the field is 256 µs.The size of the field is 4 octets. The unit of the field is 4 µs. |
| Duty Cycle Period | Indicates the preferred elapsed time between the start times of two successive WUR duty cycle schedules with units indicated by the Duty Cycle Period Units field in the most recently received WUR Operation element from the associated WUR AP (see 31.5 (WUR duty cycle operation)). | The size of the field is 2 bytes.The size of the field is 2 bytes.The size of the field is 2 octets. |
| Recommended WUR Wake-up Frame Rate | Indicates the requested data rate with which an indidividually or group addressed WUR wake up frame is transmitted to the WUR non-AP STA. | The size of the field is 2 bits. This field is set to 0 to indicate that the WUR non-AP STA has no recommendation on the data rate to be used for WUR wake up frames. This field is set to 1 to indicate that LDR is recommended to be used for individually or group addressed WUR wake up frames transmitted to the WUR non-AP STA. This field is set to 2 to indicate that HDR is recommended to be used for individually or group addressed WUR wake up frames transmitted to the WUR non-AP STA. The value of 3 is reserved. |
| Reserved | Reserved field | The size of the field is 6 bits. |

**TGax Editor: *Insert the following text at Page 54 Line 61:***

A WUR non-AP STA may indicate in the WUR Mode element its recommendation on which data rate (LDR or HDR) to use for individually or group addressed WUR wake up frames transmitted to that WUR non-AP STA.

**TGax Editor: *Insert the following text at Page 55 Line 8:***

After a WUR non-AP STA has negotiated WUR service with a WUR AP, the WUR non-AP STA may request to update the WUR parameters with the associated WUR AP STA by using the PCR component to transmit a WUR Mode Setup frame with the Action Type in the WUR Mode element set to “Enter WUR Mode Request” or “Enter WUR Mode Suspend Request” and updated WUR parameters in the WUR Mode element. The WUR AP shall follow the procedure defined in Section 31.6.1 (WUR Mode Setup) when responding to the WUR Mode Setup frame.