IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Comment resolutions for 11.24 | | | | |
| Date: 2018-01-05 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Alfred Asterjadhi | Qualcomm Inc. | 5775 Morehouse Dr, San Diego, CA 92109 | +1-858-658-5302 | aasterja@qti.qualcomm.com |
| George Cherian | Qualcomm Inc. |  |  |  |
| Abhishek Patil | Qualcomm Inc. |  |  |  |

Abstract

This submission proposes resolutions for multiple comments related to TGax D2.0 with the following CIDs:

* 11067, 12455 (2 CIDs)

Revisions:

* Rev 0: Initial version of the document.

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| 11067 | Adrian Stephens | 216.35 | "An HE AP should not change the value of the PlannedESS subfield within the lifetime of the BSS." -- this is, presumably, known at the time of the start of the BSS. There is no reason to allow it to be changed. | Change "should" -> "shall" | Accepted |
| 12455 | Liwen Chu | 214.62 | IF the Event Type is BSS Color Collision, the log content of a STA is missing. | Add the related rules about log ocntent of BSS Color collision. | Revised –  Agree in principle with the comment. Proposed resolution provides the log rules for the cases when the Event Type is BSS Color Collision.  TGax editor to make the changes shown in 11-18/0041r0 under all headings that include CID 12455. |

**Discussion: *…***

11.24 Wireless network management procedures

11.24.2 Event request and report procedures

Change the 1st paragraph and insert a new paragraph as follows:(#3088)

**TGax Editor: *Change the paragraphs below of this subclause as follows (#CID 12455):***

The Event Request and Event Report frames enable network real-time diagnostics. A STA whose dot11EventsActivated is true shall support event requests and reports and shall set to 1 the Event field of the Extended Capabilities elements that it transmits. If dot11EventsActivated is true and the Event Type is not BSS Color Collision, a STA shall log all Transition, RSNA, peer-to-peer, and WNM log events, including the corresponding TSF, UTC Offset and Event Time Error. An HE STA that has dot11EventsActivated is true and reports BSS color collisions shall log all BSS color collision events, including the TSF value when the STA finished logging the events that are reported (see 11.24.2.7 (BSS Color Collision event)). (#12455)

A STA whose dot11AutonomousBSSColorCollisionReportingImplemented is true shall set the Event field of the Extended Capabilities elements that it transmits to 1.

Insert a new subclause at the end of 11.24.2:(#3088)

* BSS color collision event

The BSS color collision event report enables a non-AP HE STA to inform its associated AP whether a BSS color collision has occurred. The report carries information about the BSS color used by OBSSs that the reporting STA is able to detect.

* Fine timing measurement procedure
* Measurement exchange

Change the 10th paragraph as follows:

For the Fine Timing Measurement frames transmitted during the FTM session:

* The responding STA shall not use a bandwidth wider than that indicated by the STA in the initial Fine Timing Measurement frame.
* The responding STA shall not use an HE format if the STA indicated VHT or HT-mixed or non-HT format in the initial Fine Timing Measurement frame.
* The responding STA shall not use a VHT format if the STA indicated HT-mixed or non-HT format in the initial Fine Timing Measurement frame.
* The responding STA shall not use an HT format if the STA indicated non-HT format in the initial Fine Timing Measurement frame.(#9698, #7761)
* BSS transition management for network load balancing
* BSS transition capability

Change the 3rd paragraph as follows:(#5163)

Implementation of BSS transition management is optional for a WNM STA that is not a non-AP HE STA. A STA that implements BSS transition management has dot11BSSTransitionImplemented equal to true. When dot11BSSTransitionImplemented is true, dot11WirelessManagementImplemented shall be true. A STAwhose dot11BSSTransitionActivated is true shall support BSS transition management and shall set to 1 the Transition field of the Extended Capabilities elements that it transmits. A non-AP HE STA shall have dot11BSSTransitionImplemented and dot11BSSTransitionActivated equal to true.

* BSS transition management response

Change the 2nd paragraph as follows:(#5163)

The STA’s SME may include the result of its BSS transition decision in the Target BSSID field and BTM Status Code field in the MLME-BTM.response primitive. A BTM Status Code field set to a value of 0 (i.e., Accept) indicates the STA will transition from the current BSS. The non-HE STA’s SME receiving an MLMEBTM.indication primitive may issue an MLME-BTM.response primitive with a valid status code not equal to a value of 0 (i.e., Accept) indicating rejection if it is unable to comply with this BSS transition management request.

The HE STA's SME receiving an MLME-BTM.indication primitive shall issue an MLME-BTM.response primitive with a valid status code not equal to a value of 0 (i.e., Accept) indicating rejection if it is unable to comply with this BSS transition management request.

Insert a new subclause at the end of 11.24.7 as follows:(#5163)

* Planned ESS

The AP can indicate that it is in a planned ESS to assist associated STAs' roaming. If it does, it indicates whether it is at the physical edge of the ESS, and can provide a recommendation on the RSSI level to consider for BSS transition.

The Planned ESS subfield in the ESS Information field indicates whether the AP is part of an ESS which is planned with several BSSs in overlapping configuration, whereby an associated STA may adjust its BSS transition algorithms accordingly.

NOTE 1—In a planned ESS the non-AP STA could use the Recommended BSS Transition Threshold Within The ESS subfield to modify when it starts scanning for a new BSS. However, how the non-AP STA adjusts its BSS transition algorithms is implementation specific and beyond the scope of this standard.

The Edge Of ESS subfield in the ESS Information field indicates to the non-AP STA that it is associated with a BSS at the edge of an ESS (e.g., exit of a building).

NOTE 2—The non-AP STA can prepare for more aggressive roaming or the device the non-AP STA is in can prepare for switching to a different system. However, how the non-AP STA uses the edge of an ESS information is implementation specific and beyond the scope of this standard.

**TGax Editor: *Change the paragraphs below of this subclause as follows (#CID 11067):***

The Recommended BSS Transition Threshold Within ESS subfield indicates to the non-AP STA the Beacon RSSI below which it should initiate a BSS transition. The value of the Edge Of ESS subfield and the Recommended BSS Transition Threshold Within ESS subfield may be changed by the AP STA if conditions in the ESS change. An HE AP shall(#11067) not change the value of the Planned ESS subfield within the lifetime of the BSS.