IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CIDs related to WNM Sleep Mode | | | | |
| Date: 2021-07-09 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Rajat Pushkarna | Panasonic Corporation | 202, Bedok South Avenue 1, Singapore- 469332 |  | rajat.pushkarna@sg.panasonic.com |
| Rojan Chitrakar |  |  |  |  |
| Abhishek Patil | Qualcomm |  |  |  |
| Po-Kai Huang | Intel |  |  |  |

Abstract

This document proposes CR related to following CIDs: 4128, 4129, 5781, 6178, 6179

Revisions:

* Rev 0 : Initial version of the document.
* Rev 1: Added definition of MLO (after feedback from Abhi and Po-Kai)
* Rev 2: Minor editorial changes.

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 TGbe Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGbe Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Commenter | Clause | Page | Line | Comment | Proposed Change | Resolution |
| 4128 | Alfred Asterjadhi | 4.3.19.23 | 45 | 43 | Weird dependency. How can an association be a multi-link setup or not be a multi-link setup? Please find alternative terminology that is clear. I think this applies to several instances in the draft (avoiding adding other similar comments). | As in comment. | **Revised.**  Agree with the commenter. Changed the referred term to MLO to be consistent with the text.  **TGbe editor to make the changes shown in IEEE 802.11-21/1223r2 under all headings that include CID 4128.** |
| 4129 | Alfred Asterjadhi | 4.3.19.23a | 45 | 63 | Any STA. Hence, replace "does not disassociate the non-AP MLD" with "does not disassociate a non-AP MLD" | As in comment. | **Revised.**  Agree with the commenter that it can be any STA not a particular STA.  **TGbe editor to make the changes shown in IEEE 802.11-21/1223r2 under all headings that include CID 4129.** |
| 5781 | Lei Huang | 4.3.19.23 | 45 | 51 | "a non-AP MLD" should be "the non-AP MLD" | As in comment. | **Accepted.** |
| 6178 | Michael Montemurro | 4.3.19.23 | 45 | 46 | It would be simpler just to say, for MLO. | Change "For an association that is a multi-link setup between an AP MLD and a non-AP MLD" to "For MLO" | **Revised.**  Agree with the commenter that MLO is the term used to refer a multi-link setup between AP MLD and non-AP MLD.  **TGbe editor to make the changes shown in IEEE 802.11-21/1223r2 under all headings that include CID 6178**. |
| 6179 | Michael Montemurro | 4.3.19.23a | 45 | 61 | It would be simpler just to say for MLO | Change "When association is for a multi-link setup" to "For MLO" | **Revised.**  Agree with the commenter that MLO is the term used to refer a multi-link setup between AP MLD and non-AP MLD.  **TGbe editor to make the changes shown in IEEE 802.11-21/1223r2 under all headings that include CID 6179.** |

***TGbe Editor: Please note baseline is 11be D1.01***

**3.2 Definitions specific to IEEE 802.11**

***TGbe Editor: Please add the definition of MLO in Clause 3.2 as follows:***

**Multi-Link Operation (MLO):** Operations between two Multi-Link Devices (MLDs) as described in 35.3 (Multi-Link Operation).

**4.3.19.23 WNM sleep mode**

***Change as follows:***

WNM sleep mode is an extended power save mode in which a non-AP STA or STAs affil­iated with a non-AP MLD need not listen for every DTIM Beacon frame and need not perform GTK/IGTK/BIGTK updates. For ~~an association that is not a multi-link setup~~ non-MLO (#4128), WNM sleep mode enables a non-AP STA to signal to an AP that it might sleep for a specified length of time. For ~~an association that is a multi-link setup between an AP MLD and a non-AP MLD~~ MLO (#6178), WNM sleep mode enables a STA affiliated with the non-AP MLD to signal to an AP affiliated with the AP MLD that all the STAs affiliated with the non-AP MLD might sleep for a specified length of time. This enables a non-AP STA or a non-AP MLD to reduce power consumption and remain associated while the non-AP STA or a (#5781) non-AP MLD has no traffic to send to or receive from the AP or AP MLD.

***Change as follows:***

**4.3.19.23a MLD max idle period management**

(#1027)~~When association is for a multi-link setup~~ For MLO (#6179), MLD max idle period management service enables an AP MLD to indicate a time period during which the AP MLD does not disassociate ~~the~~ a (#4129)non-AP MLD(#2090)(#1108) due to nonreceipt of frames from the non-AP MLD on any setup link. This supports improved power saving at the non-AP MLD and resource management at the AP MLD.

**SP:** Do you agree to the resolutions provided in the document 11-21/1223r2 for the following CIDs: 4128, 4129, 5781, 6178, 6179 for inclusion in the latest 11be draft?