IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CC50: Switching back condition for NPCA operation | | | | |
| Date: 2025-07-04 | | | | |
| Author(s): | | | | |
| Name | Company | Address | Phone | email |
| Dongju Cha | LG Electronics |  |  | dongju.cha@lge.com |
| Insun Jang | LG Electronics |  |  | insun.jang@lge.com |
| Jinsoo Choi | LG Electronics |  |  | js.choi@lge.com |
| Sunhee Baek | LG Electronics |  |  | sunhee.baek@lge.com |
| Yelin Yoon | LG Electronics |  |  | yl.yoon@lge.com |
| Geonhwan Kim | LG Electronics |  |  | geonhwan.kim@lge.com |
| Hongwon Lee | LG Electronics |  |  | hongwon.lee@lge.com |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Abstract**

This document contains resolutions for the following 4 CIDs related to the NPCA switching back condition received for TGbn CC50 Comment Resolution:

* 251, 1516, 1795, 3956

Revisions:

* Rev 0: Initial version of the document.

**Introduction**

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 TGbn Draft. The abstract, revision information, introduction, explanation of the proposed changes and references sections are not part of the adopted material.

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

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

**CIDs**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **PP.LL** | **Comment** | **Proposed Change** | **Resolution** |
| 1516 | 37.10 | 80.31 | Some rules on when NPCA STA should switch back to the BSS primary channel need to be defined | There could be some rules as follows 1. NPCA AP on the NPCA primary channel shall be switched back to the BSS primary channel before the duration of OBSS activity that makes the BSS primary channel busy ends 2. NPCA non-AP STA(s) on the NPCA primary channel shall be switched back to the BSS primary channel before the NPCA Duration of AP indicated in NPCA ICF or NPCA ICR transmitted by AP ends | **Revised**  Agree with the commenter in principle.  Added some rules on when NPCA STA need to switch back to the BSS primary channel  **TGbn editor, please make the changes tagged by CID 1516 in the document** |
| 251 | 37.10 | 78.15 | There lacks description for the "switch back" condition | Suggest to add the "switch back" condition | **Revised**  Agree with the commenter in principle.  Added some rules on when NPCA STA need to switch back to the BSS primary channel  **TGbn editor, please incorporate the changes tagged by CID 1516 in the document** |
| 1795 | 37.10 | 78.50 | Procedures for an NPCA STA to return from an NPCA primary channel to the BSS primary channel should be clarified. | As in comment. | **Revised**  Agree with the commenter in principle.  Added some rules on when NPCA STA need to switch back to the BSS primary channel  **TGbn editor, please incorporate the changes tagged by CID 1516 in the document** |
| 3956 | 37.10 | 78.17 | The rules for switching back from NPCA primary channel to primary channel need to be clarified | As in comment. | **Revised**  Agree with the commenter in principle.  Added some rules on when NPCA STA need to switch back to the BSS primary channel  **TGbn editor, please incorporate the changes tagged by CID 1516 in the document** |

**Text to be adopted begins here.**

***TGbn editor: Please make the following changes to 802.11bn D0.3 and 25/936r7:***

37.10 Non-primary channel access (NPCA)

37.10.3 NPCA transmission rules

1. Each time that the STA switches to the NPCA Primary channel, the STA shall
2. If condition 1) from 37.10.2 (NPCA mode starting conditions) is met, then set NPCA\_CFRAME\_TXOP\_REM\_DUR to 0.
3. Set NPCA\_TIMER to the largest non-zero value of the variables NPCA\_PPDU\_REM\_DUR, NPCA\_PHY\_TXOP\_REM\_DUR and NPCA\_CFRAME\_TXOP\_REM\_DUR, minus the largest of the switch back delays of the STA and its peers.
4. (#1516)Set NPCA\_SWITCH\_BACK\_TIMER to the largest non-zero value of the variables NPCA\_PPDU\_REM\_DUR, NPCA\_PHY\_TXOP\_REM\_DUR and NPCA\_CFRAME\_TXOP\_REM\_DUR, minus the switch back delay of the STA
5. initiate countdown of the MAC variable NPCA\_TIMER (#1516)and NPCA\_SWITCH\_BACK\_TIMER in units of 1 usec

***TGbn editor: Please add a new section under 37.10.(Non-primary channel access (NPCA)) to 802.11bn draft D0.3 and 25/936r7:***

(#1516)37.10.4 Switching back to the BSS primary channel

An NPCA STA that has switched to the NPCA primary channel shall switch back to the BSS primary channel from the NPCA primary channel if the NPCA\_SWITCH\_BACK\_TIMER expires

An NPCA non-AP STA shall switch back to the BSS primary channel from the NPCA primary channel if any of the following events occurs before the expiration of the NPCA\_SWITCH\_BACK\_TIMER:

1. The NPCA non-AP STA receives a Trigger frame that does not set to the value of 1 in the NPCA Primary Channel Indication subfield of Special User Info field from its associated NPCA AP
2. In case of its use of untriggered UL transmission is disabled by the MU EDCA protocol, the NPCA non-AP STA do not receive an initial Control frame that contains a Special User Info field with NPCA Primary Channel Indication subfield set to 1 from its associated NPCA AP until the value of the NPCA\_SWITCH\_BACK\_TIMER is equal to the value of the NPCA Minimim Duration Threshold field

**Text to be adopted ends here.**