IEEE P802.11
Wireless LANs

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| MAC MLO: Blindness due to NSTR operation |
| Date: 2021-01-20 |
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Abstract

Spec text proposal for 11be D0.4 related to motions on channel access for a NSTR link pair following a transmission event.

Revisions

* Rev 0: Initial version.

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. The introduction and the explanation of the proposed changes are 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).***

**This document proposes spec text contribution for the following motions that passed in 11be:**

In R1, if during a transmission of a STA (STA-1) of a non-STR non-AP MLD, another STA (STA-2) of the same MLD cannot detect its medium state when required (due to STA-1’s UL transmission interference), STA-2 shall start a MediumSyncDelay timer at the end of STA-1’s transmission, unless the STA-2 ended a transmission at the same time.

* The MediumSyncDelay timer expires after a duration value that is either assigned by AP or a default value in the specification or if at least either of the following events happens:
	+ any received PPDU with a valid MPDU,
	+ a received PPDU whose corresponding RXVECTOR parameter TXOP\_DURATION is not UNSPECIFIED,

whichever happens first.

* STA-2 shall perform CCA until the MediumSyncDelay timer expires. Additional TBD exceptions may be considered.

NOTE – It is TBD whether STA-2 is required to start the MediumSyncDelay timer if the transmission of STA-1 is shorter than TBD duration.

[Motion 150, #SP373, [92] and [273]]

**Proposed spec text:**

***TGbe editor: Insert the new subclause 35.3.13.7 Medium synchronization recovery procedure as follows:***

**35.3.13.7 Medium synchronization recovery procedure** [Motion 150, #SP373]

A STA affilitated with a non-AP MLD that belongs to a NSTR link pair, is considered to have lost medium synchronization (due to UL interference) when the other STA, that is affiliated with the same MLD and belongs to that link pair, transmits a PPDU, except under the following conditions:

* Both STAs ended the transmission at the same time.

A STA that has lost medium synchronization due to transmission by another STA affiliated with the same MLD shall start a MediumSyncDelay timer at the end of that transmission event. It is TBD whether the STA is required to start the MediumSyncDelay timer if the transmission event is shorter than TBD duration.

The MediumSyncDelay timer is a single timer, shared by the EDCAFs within a non-AP STA, that is initialized with a default TBD value ~~in the specification~~ or the value contained in the TBD field of the TBD element transmitted by its associated AP, whichever is smaller. In addition, the timer expires when any of the following events occur:

* The STA receives a PPDU with a valid MPDU.
* The STA receives a PPDU whose corresponding RXVECTOR parameter TXOP\_DURATION is not UNSPECIFIED.

While the MediumSyncDelay timer is running at a STA, it shall perform CCA. Additional TBD exceptions may be considered.