IEEE P802.11
Wireless LANs

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| CR for NSTR related CIDs |
| Date: 2023-10-17 |
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Abstract

This submission proposes comments resolution of the following 7 CIDs received for TGbe LB275:

CIDs:

19125, 19314, 19476

19165, 19725, 19726, 19727

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: update during the presentation
* Rev 2: update the resolution of 19726

***TGbe editor: The baseline for this document is IEEE 802.11be D4.1***

1. **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 TGbe Draft. The introduction and the explanation of the proposed changes are not part of the adopted material.

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| **CID** | **Commenter** | **Clause**  | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| 19125 | Bo Sun | 3.2 | 58.57 | The defitions of "MLD" and "affiliated STA" are referring each other. They're a good example of circular definition. There should be at least one element defined not referring to the other term. | Please rephrase the definition of those two terms to avoid curcular definition. | RejectedThere is no definition of “MLD” or “affiliated STA” in this sentence. It just refer the links to STAs affiliated with a MLD. The issue of circular definition doesn’t exist here. |
| 19314 | Atsushi Shirakawa | 3.2 | 58.58 | What specifically does "receiver requirements" mean ? We cannot find subclause which name is "receiver requirments" in clause 36. | Specify "receiver requirments". Which subclause we should refer to ? | RevisedA more specific subclause 36.3.21 (Receiver specification) is referred to for the receiver requirements.TGbe editor to make the changes with the CID tag 19314 in doc 11-23/1794r2 |
| 19476 | Stephen McCann | 3.2 | 58.60 | The sentence "Each link of such a pair is a member of an NSTR link pair" is not necessary as this is a definition of an NSTR link pair. It doesn't need to be repeated. | Remove the cited sentence. | Accepted |
|  |  |  |  |  |  |  |
| 19165 | Tomoko Adachi | 35.3.16.4 | 556.19 | The two reasons each described after "due to" are independent. It seems to be better to concatenate with "or". | Change "and" before the 2nd "due to" appearing in line 19 to "or". | Rejected“and” is the correct wording. If any of the two conditions is not satisified, the non-AP STA shall initial the transmission. When the first condition is not satisified, it means the non-AP STA doesn’t expect an interference, and the non-AP STA shall initiate the transmission. When the first condition is satisfied, while the second condition is not, it means there are some alternative frames that would not suffer from the interference, then the non-AP STA shall transmit these alternative frames. |
| 19725 | Zinan Lin | 35.3.16.4 | 556.17 | Two parts are not clear: 1) if there is expected interference on the other link, then the non-AP STA may choose not to transmit any frame (not the frame corresponding to a specific AC) 2) the reason after the 2nd "due to": the alternative frame on the same link as the one mentioned in the phrase after the first "due to" or the frame on any other link? | As comments | RevisedFor comment part 1), the obtained TXOP is related to a specific AC which was mentioned at the beginning of the sentence. This sentence is related to only the frame of that AC, and it is not related to other ACs. For comment part 2), “which can be transmitted on this link” is added to clarify that the alternative frame is on this link instead of the other link.TGbe editor to make the changes with the CID tag 19725 in doc 11-23/1794r2 |
| 19726 | Zinan Lin | 35.3.16.4 | 556.31 | The word usage here is confusing: "consider the transmit queue for that AC as empty until any frame exists in the queue which if transmitted, the transmitter determines, will not cause an unacceptable level of interference caused by transmission at the non-AP STA operating on the other link of an NSTR link pair...". Does it mean "will not cause an unacceptable level of interference to the transmission at the non-AP STA ..." or "will tolerate an acceptable level of interference caused by the transmission at the non-AP STA ..." | .. Will not cause an unacceptable level of interference to the transmission at the non-AP STA operating ... | RevisedThe text is updated to clarify that the interference may caused by the transmission at the non-AP STA on any one of the links of the NSTR link pair.TGbe editor to make the changes with the CID tag 19726 in doc 11-23/1794r2 |
| 19727 | Zinan Lin | 35.3.16.4 | 556.43 | Is it clearer to say that " any of the other non-AP STA(s) affiliated with the same non-AP MLD is expected to be receiving those group addressed MPDUs", i.e., adding "same" between "the" and "non-AP MLD"? | Refer to the comment | Rejected.Only one non-AP MLD is mentioned in this sentence, “the non-AP MLD” could refer to that non-AP MLD without ambiguity.  |

***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).***

1. **Proposed spec text**

***TGbe editor: Modify the definition of NSTR link pair in 3.2 (Definitions specific to IEEE 802.11) as follows:***

**nonsimultaneous transmit and receive (NSTR) link pair:** [NSTR link pair] A pair of links corresponding to stations (STAs) affiliated with a multi-link device (MLD) for which the receiver requirements specified in 36.3.21 (Receiver specification) are not met on one of the links when a STA affiliated with the MLD is transmitting on the other link. (#19476)

NOTE—If an MLD supports transmission on link 1 concurrently with reception on link 2, but cannot support transmis­sion on link 2 concurrently with reception on link 1, this pair of links is NSTR for that MLD.

***TGbe editor: Modify the paragraphes in 35.3.16.4 (Nonsimultaneous transmit and receive(NSTR) operation) as follows:***

35.3.16.4 Nonsimultaneous transmit and receive (NSTR) operation

An AP affiliated with an AP MLD that has gained the right to initiate transmission of a frame of an AC on a link through the rules for EDCA backoff in 10.23.2.4 (Obtaining an EDCA TXOP) may choose not to transmit any frame corresponding to that AC due to expected interference caused by the transmission at the non-AP STA operating on (#19726) one of the links of an NSTR link pair that the link belongs to within the intended recipient non-AP MLD and due to lack of availability of an alternative frame in the queue of the link (#19725) that would not introduce the opportunity for such interference.

A non-AP STA affiliated with a non-AP MLD operating on a link of an NSTR link pair that has gained the right to initiate transmission of a frame of a specific AC on a link through the rules for EDCA backoff in 10.23.2.4 (Obtaining an EDCA TXOP) or that is enabled by an AP that is a TXOP holder to use a portion of the obtained TXOP through the rules for triggered TXOP sharing in 35.2.1.2 (Triggered TXOP sharing procedure) may choose not to transmit any frame corresponding to that AC due to expected interference caused by the transmission at the non-AP STA operating on (#19726) one of the links of the NSTR link pair within the non-AP MLD and due to lack of availability of an alternative frame in the queue of the link (#19725) that would not introduce the opportunity for such interference.

***End of change***