**IEEE P802.11
Wireless LANs**

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| LB266 CR for 35.3.19 (NSTR Mobile AP MLO)  |
| Date: 2022-10-20 |
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Abstract

This submission proposes resolutions for multiple comments related to TGbe D2.0 with the following CIDs (4 CIDs):

* 12390, 10168, 10721, 13007

Revisions:

* Rev 0: CR for #12390, #10168, #10721, #13007.

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 subsequent 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** | **Subclause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| --- | --- | --- | --- | --- | --- | --- |
| 12390 | Rojan Chitrakar | 35.3.19.1 | 469.12 | Why "peer device" is used here when the immediately preceding sentence and elsewhere use associated non-AP STA? | Replace "peer device" with associated non-AP STA. | Revised.Agree with the comment in princilple.Tgbe editor please implement changes as shown in doc 11-22/1844r0 tagged as #12390. |
| 10168 | Julien Sevin | 35.3.19.1  | 468.44 | In the scope of an NSTR mobile AP MLD operation, an NSTR mobile AP MLD shall designate one link of an NSTR link pair as the primary link. No procedure has been specified to designate the primary link | Specify a procedure for designating a primary link | RevisedAgree with the comment in princilple.An explicit Primary Link Indication is added. Tgbe editor please implement changes as shown in doc 11-22/1844r0 tagged as #10168. |
| 10721 | Xiandong Dong | 35.3.19.1 | 468.45 | is it needed to difine a mechnism wrt how does the NSTR mobile AP designate a link as primary link, if not, how does the non-AP MLD know it will not send probe request on nonprimary link, please clarify | As in the comment | RevisedAgree with the comment in princilple.An explicit Primary Link Indication is added. Tgbe editor please implement changes as shown in doc 11-22/1844r0 tagged as #10721 |
| 13007 | Chunyu Hu | 35.3.19.1 | 468.44 | How is the primary link designation is done? Does it need to be signaled/advertised to (un)associated STAs? If not, is the primary link selection permanent throughput the lifetime of the BSS? | Need to develop text to address the problems raised in the comment. | RevisedAgree with the comment in princilple.An explicit Primary Link Indication is added.Tgbe editor please implement changes as shown in doc 11-22/1844r0 tagged as #13007. |

1. **Introduction**
2. **Proposed spec text**

**35.3.19 NSTR mobile AP MLD operation**

**35.3.19.1 General**

***TGbe editor: Please modify the following subclause 35.3.19.1 as follows:***

…

APs affiliated with an NSTR mobile AP MLD that are simultaneously transmitting PPDUs to the associated non-AP STAs (#12390) affiliated with an MLD shall align the end time of PPDUs following the same rules that are defined for an AP MLD in 35.3.16.5 (PPDU end time alignment).

STAs affiliated with a non-AP MLD that are simultaneously transmitting PPDUs to the respective associated (#12390) APs affiliated with an NSTR mobile AP MLD shall align the end time of PPDUs following the same rules that are defined for an AP MLD in 35.3.16.5 (PPDU end time alignment).

**35.3.19.2 Discovery of an NSTR mobile AP MLD**

***TGbe editor: Please modify the following subclause 35.3.19.2 as follows:***

The discovery procedure for an NSTR mobile AP MLD is the same as the procedure described in 35.3.4 (Discovery of an AP MLD) with the following exceptions:

—An AP affiliated with an NSTR mobile AP MLD and that is operating on the primary link of an NSTR link pair shall indicate that it is an NSTR mobile AP MLD by setting AP MLD Type Indication subfield to 1 in MLD Capabilities and Operations field of Common Info field in the Basic Multi-Link element. The AP shall indicate that it is operating on the primary link by setting the Primary Link Indication subfield to 1 in the MLD Capabilities and Operations subfield. (#10168, #10721, #13007)

**9.4.2.312.2.3 Common Info field of the Basic Multi-Link element**

***TGbe editor: Please modify the following Figure as below:***

B0 B3 B4 B5 B6 B7 B11 B12 B13 B15

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Maximum Number Of Simultaneous Links | SRS Support | TID-To-Link Mapping Negotiation Support | Frequency Separation For STR | AAR Support | Reserved |
| AP MLD Type Indication  | Primary Link Indication (optional) | Reserved |

 Bits: 4 1 2 5 1 3

**Figure 9-1002l—MLD Capabilities and Operations subfield format** (#10168, #10721, #13007)

***TGbe editor: Please modify the following Table as below:***

**Table 9-401j—Subfields of the MLD Capabilities and Operations field *(continued)*** (#10168, #10721, #13007)

|  |  |  |
| --- | --- | --- |
| Subfield | Definition | Encoding |
| … | … | … |
| Frequency Separation For STR/AP MLD Type Indication/Primary Link Indication  | Frequency Separation For STR: Indicates the minimum frequency gap between any two links that is recommended by the non-AP MLD for STR operation. The fre-quency gap is specified as the dif-ference between the nearest frequency edges of the two links.AP MLD Type Indication: Indicates the type of an AP MLD.Primary Link Indication: Indicates the primary link for an NSTR mobile AP MLD. It is present when AP MLD Type Indication is set to 1. | Frequency Separation For STR:For a non-AP MLD:Set to 0 to indicate that no frequency sepa-ration information is provided.Set to a nonzero value *n* to indicate that the STR frequency gap is MHz.AP MLD Type Indication: For an AP MLD:Set B7 to 0 to indicate that the AP MLD is not an NSTR mobile AP MLD; B8–B11 are reserved.For an NSTR mobile AP MLD:Set B7 to 1 to indicate that the AP MLD is an NSTR mobile AP MLD;Set B8 to 1 to indicate that the AP is operating on a primary link Indication: otherwise, set to 0.B9–B11 are reserved.See 35.3.16.2 (Multi-link device capability and operation signaling). |
| … | … | … |