IEEE P802.11
Wireless LANs

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| TGbe CC-34 CIDs 2476 and 3133 |
| Date: 2021-05-07 |
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Background

This contribution proposes comment resolutions to comments 2476 and 3133 received in CC34 on Clause 12 of TGbe D0.3

Straw\_poll: Adopt the resolutions for CIDs 2476 and 3133 in this document instruct the editor to update the latest TGbe draft.

### Comment

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| **CID** | **Page** | **Clause** | **Duplicate of CID** | **Comment** | **Proposed Change** |
| 2476 | 131 | 59 | 35.3.5.2 | Change "The PMK, PTK, and the same PN space are used for all the setup links between the ﾠnon-AP MLD and the AP MLD for the PTKSA." to "The PMK, PTK, and PN space are common to all the links set up between the non-AP MLD and the AP MLD for the PTKSA." | As in the comment |
| 3133 | 131 | 56-61 | 35.3.5.2 | This paragraph mixes keys, PN, SA, MAC addresses all together. Consider to rewrite based on the proposed change. | A single PMKSA and a single PTKSA are established between the non-AP MLD and the AP MLD for all the setup links. (and amend the PMKSA and PTKSA definitions to specify MLD MAC addresses) |

### Discussion:

The cited paragraph is as follows:

“After a successful multi-link (re)setup between a non-AP MLD and an AP MLD, a PMK is established and a PTK is derived through a 4-way handshake between the non-AP MLD and the AP MLD (see 12.7.6 (4-way handshake)). The PMK, PTK, and the same PN space are used for all the setup links between the non-AP MLD and the AP MLD for the PTKSA. The non-AP MLD and the AP MLD use their respective MLD MAC addresses to derive the PMK under the SAE method and PTK.”

The PTK is not always derived through a 4-way handshake, it could be derived using FT or FILS protocols. A more general statement would be that the PMKSA and PTKSA are established between the AP MLD and non-AP MLD using their respective MLD MAC addresses.

Cryptographic encapsulation uses the AP MLD and non-AP MLD MAC addresses and is described in detail in 12.5.3.3 and 12.5.5.3. It would be better to simply refer to these clauses.

### Proposed Resolution: (2089)

Revised. The cited paragraph has been modified to reference the PMKSA, PTKSA and their relationship to the AP MLD and non-AP MLD MAC addresses.

Replace

“After a successful multi-link (re)setup between a non-AP MLD and an AP MLD, a PMK is established and a PTK is derived through a 4-way handshake between the non-AP MLD and the AP MLD (see 12.7.6 (4-way handshake)). The PMK, PTK, and the same PN space are used for all the setup links between the non-AP MLD and the AP MLD for the PTKSA. The non-AP MLD and the AP MLD use their respective MLD MAC addresses to derive the PMK under the SAE method and PTK..”

With
“After a successful multi-link (re)setup between a non-AP MLD and an AP MLD, a PMKSA and PTKSA are established between the non-AP MLD and the AP MLD (for example, see 12.7.6 (4-way handshake)). The PTKSA is used for cryptographic encapsulation across all setup links as described in 12.5.3.3 and 12.5.5.3, respectively.”