IEEE P802.11
Wireless LANs

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| CIDs 1046, 1187, 1188, 1190 and 1191 |
| Date: 2024-12-19 |
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Abstract

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This submission addresses CIDs 1046, 1187, 1188, 1190, 1191 against 3.2 (Definitions).

We propose draft specification text for TGbi draft D0.7.

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Updated with updated resolution for CID1046.
* Rev 2: Updated based on feedback in 2024-12-18 TGbi call.

| **CID** | **Commenter** | **Clause**  | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| --- | --- | --- | --- | --- | --- | --- |
| 1046 | Antonio DeLaOlivaDelgado | 3.2 | 19.62 | We have over the air sequence number and over the air packet number, should not we have an over the air MAC address definition? | Add a definition of over-the-air MAC address | **Revised**The term “over-the-air MAC address” is not clear, and not used very often, and is difficult to define. It is easier to update the text in locations where “over-the-air MAC address” (or its abbreviation) are used. Results in updates to 4.5.4.10a (4.5.4.10a Enhanced Data Privacy (EDP) enhancements), 12.16.6.1 (Non-MLO), 12.16.6.2 (MLO)Document 1741r2 accounts for resolution of this CID. Instruction to the editor: apply changes referenced with tag: #1046 |
| 1187 | Mark RISON | 3.2 | 19.35 | If "frame anonymization" can only be used with MLO, then it should be called "MLO frame anonymization". Similarly "group enhanced data privacy (EDP) epoch" and "individual enhanced data privacy (EDP) epoch" and "presence monitoring" | As it says in the comment | **Rejected**There is no need to prefix terms to clarify their scope. The existing terms are sufficient.  |
| 1188 | Mark RISON | 3.2 | 19.39 | "in frame anonymization mechanisms" should be just "in frame anonymization" (see previous definition) | As it says in the comment | **Accepted**Document 1741r2 accounts for resolution of this CID. Instruction to the editor: apply changes referenced with tag: #1188 |
| 1190 | Mark RISON | 3.2 | 19.52 | "Counter Mode (CTR) with cipher-block chaining message authentication code (CBC-MAC)" -- capitalisation inconsistent | As it says in the comment | **Rejected**This expansion is identical to other expansions of CCMP in the baseline text. See following examples:“payload protected (PP) aggregate medium access control (MAC) service data unit (A-MSDU): [PP AMSDU]A-MSDU that is protected with (#1912)Counter Mode (CTR) with cipher-block chaining messageauthentication code (CBC-MAC) protocol (CCMP) or (#1912)Galois/Counter Mode (GCM) protocol(GCMP) but does not include the A-MSDU Present field (bit 7 of the QoS Control field) in the constructionof the additional authentication data (AAD).”“payload protected (PP) aggregate medium access control (MAC) service data unit (A-MSDU): [PP AMSDU]A-MSDU that is protected with (#1912)Counter Mode (CTR) with cipher-block chaining messageauthentication code (CBC-MAC) protocol (CCMP) or (#1912)Galois/Counter Mode (GCM) protocol(GCMP) but does not include the A-MSDU Present field (bit 7 of the QoS Control field) in the constructionof the additional authentication data (AAD).” |
| 1191 | Mark RISON | 3.2 | 19.63 | Definitions start with an uppercase | Change ": determining" to ": Determining" | **Accepted**Document 1741r2 accounts for resolution of this CID. Instruction to the editor: apply changes referenced with tag: #1191 |

**Proposed spec text:**

***TGbi editor: Add or update the following definitions in 3.2 (Definitions). The baseline for this text is Draft P802.11bi\_D0.7.***

**frame anonymization parameter set:** [FA parameter set] A set of parameters used in frame anonymization(#1188).

**presence monitoring**: D(#1191)etermining the ongoing presence of non-access point (non-AP) multi-link devices (MLDs) associated to an AP MLD.

***TGbi editor: Apply the following changes to 4.5.4.10a (MAC privacy enhancements). The baseline for this text is Draft P802.11bi\_D0.5.***

* **Enhanced Data Privacy (EDP) enhancements**

Third parties observing the wireless medium may seek to track device locations and device activity. Using EDP features, a STA or MLD may reduce the amount of information disclosed in several ways. Using EDP client privacy enhancements (CPE), a STA or MLD may reduce the content of preassociation(#1203) and association messages to reduce the opportunity to fingerprint the STA or MLD through its messages outside of a secured connection. An non-AP MLD supporting CPE frame anonymization may change its the(#1046) MAC address(es) of its affiliated STAs(#1046) during an association either at its own request or at the direction of the AP MLD with which it is associated.(#1504)

An AP MLD supporting BPE EDP features may reduce the availability of information about itself to a third party observer such as the ESS to which it belongs. A BPE AP MLD may protect the content of its Beacon frames and only be discoverable by BPE non-AP MLDs that are preconfigured to recognize the BPE AP MLD. A BPE EDP AP MLD and its associated non-AP MLDs may change the(#1046) MAC addresses of their affiliated APs and affiliated STAs (#1046)together with associated values for both unicast and group transmissions.

***TGbi editor: Apply the following changes to 12.16.6.1 (Non-MLO). The baseline for this text is Draft P802.11bi\_D0.7.***

An EDP non-AP STA shall randomize its STA(#1046) MAC address during a BSS transition(#Ed) if the BSS transition procedure uses an(#1455) encrypted (Re)Association Request frame to carry the DS MAC Address element.

***TGbi editor: Apply the following changes to 12.16.6.2 (MLO). The baseline for this text is Draft P802.11bi\_D0.7.***

An EDP non-AP MLD shall randomize (#1046)the STA MAC addresses of its affiliated STAs and its MLD MAC address (#1046) (#Ed) during a(#Ed) BSS transition if the BSS transition procedure uses an(#1455) encrypted (Re)Association Request frame to carry the DS MAC Address element.