IEEE P802.11
Wireless LANs

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| TGbi Comment Resolution – CC49 |
| Date: 2024-11-11 |
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**Abstract**

This document addresses the following comments as indicated:

Accepted: 1206

Revised: 1073, 1200, 1201, 1202, 1006, 1504

Rejected: 1255, 1204, 1205

Revision 0 – initial version

Revision 1 – with comments from presentation and correction of CID #1006

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| **CID** | **Commenter** | **Page** | **Line** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 1073 | Julien Sevin | 19.07 | 7 | 3.2 | The terms "EDP AP" and "EDP non-AP STA" used in section 12.14 are not specified | Please give the definitions of terms "EDP AP" and "EDP non-AP STA" | Revised.See text marked #1073 below in this document. |
| 1255 | Mark RISON | 0.00 |   |   | Need to address the "TBD"s | As it says in the comment | Rejected.Changes are planned to the Draft 1.0 which are intended to remove TBD mentions, but this CID does not specify the particular locations of the TBDs to be addressed. |
| 1200 | Mark RISON | 22.49 | 49 | 4.5.4.10 | "in its over the air (OTA) transmissions" -- where else could a STA use its MAC address? MAC = medium access control, and here the medium is the luminiferous aether or air | Revert the insertion | Revised.See text marked #1200 in this document. |
| 1201 | Mark RISON | 22.62 | 62 | 4.5.4.10 | "EDP MAC Randomization" -- term not defined and capitalisation bogus | As it says in the comment | Revised.See text marked #1201 in this document. |
| 1202 | Mark RISON | 22.63 | 63 | 4.5.4.10 | "management frames as well as data frames" -- wrong capitalisation | As it says in the comment | Revised.See text marked #1202 in this document. |
| 1006 | Chaoming Luo | 22.64 | 64 | 4.5.4.10 | Control frames also carry identifying parameters, such as AID, so control frames should also be considered. | Change to: in management frames as well as control frames and data frames | Revised.See text marked #1006 in this document. |
| 1204 | Mark RISON | 23.09 | 9 | 4.5.4.10a | "An MLD may change its OTA MAC address(es) during an association either at its own request or at the direction of the AP MLD with which it is associated." -- a non-MLD should also be able to do this | As it says in the comment | Rejected.The task group has chosen to support this feature only on MLDs in this amendment. |
| 1205 | Mark RISON | 23.14 | 14 | 4.5.4.10a | "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 their OTA MAC addresses together with associated values for both unicast and group transmissions. " -- a non-MLD should also be able to do this | As it says in the comment | Rejected.The task group has chosen to support this feature only on MLDs in this amendment. |
| 1504 | Mark RISON | 23.14 | 14 | 4.5.4.10a | This para describes BPE, which is not actually specified anywhere, but does not mention CPE, which is specified in this draft! | Add a para here on CPE and paras elsewhere on BPE | Revised.See text marked #1504 in this document to clarify the CPE features discussed. |
| 1206 | Mark RISON | 23.18 | 18 | 4.5.4.10a | What is a "BPE EDP AP MLD"? | Change to "BPE AP MLD" | Accepted. |

**CID #1073 -** Insert the following definitions in section 3.2 in alphabetical order:

**enhanced data privacy (EDP) access point (AP):** [EDP AP] An AP with support for at least one of the EDP features.

 **enhanced data privacy (EDP) non-access point (AP) station (STA):** [EDP non-AP STA] A non-AP STA with support for at least one of the EDP features.

**enhanced data privacy (EDP) access point (AP) multilink device (MLD):** [EDP AP MLD] An AP MLD with support for at least one of the EDP features.

 **enhanced data privacy (EDP) non-access point (AP) multilink device (MLD):** [EDP non-AP MLD] A non-AP MLD with support for at least one of the EDP features.

**CID #1006, CID #1201** **and CID #1202** – change text in 4.5.4.10 as shown

Additional mitigation ~~after association~~ can be provided by EDP features. ~~MAC Randomization. Other EDP features can be used to restrict OTA transmission of identifying parameters in management frames as well as data frames.~~

**CID# 1504** – change text in 4.5.4.10a as shown

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~~A~~ STA or MLD may reduce the content of pre-association and association messages to reduce the opportunity to fingerprint the STA or MLD through its messages outside of a secured connection. A non-AP MLD supporting CPE frame anonymization may change its OTA MAC address(es) during an association either at its own request or at the direction of the AP MLD with which it is associated.

**CID# 1200** – change text in 4.5.4.10 as shown

When a non-AP STA searches for, and connects to, an infrastructure BSS, IBSS, or PBSS or attempts to discover

services on a network preassociation, it defines the addressing of its MAC layer for the particular connection. If ~~the STA~~ ~~uses~~ a fixed MAC address identifying the STA is observable in these transactions, then ~~in its over the air (OTA) transmissions~~ it is trivial to track the STA.