IEEE P802.11
Wireless LANs

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| Proposed resolution to Clause 35 editorial comments – Part 1 |
| Date: 2021-05-06 |
| Author: |
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##### This submission contains the proposed resolution of the following 31 editorial comments.

##### 1476, 3334, 2520, 2372, 2852, 1153, 3424, 1416, 2415, 1495,

##### 2200, 2201, 2202, 2203, 2204, 2521, 2752, 2856, 2205, 1717,

3425, 2374, 3022, 3213, 3214, 3336, 2352, 2474, 2417, 1043,

1745

##### The proposed changes are based on P802.11be D0.4.

##### Revision history:

##### R0 – initial version

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 1476 | 125.28 | 35.2.1.1 | "control frame" should be capitalised. | Change to "Control frame" |

***Discussion:***



***Proposed resolution:***

Accepted.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 3334 | 126.06 | 35.2.1 | "other STA" should be "other STAs" | As commented. |
| 2520 | 126.06 | 35.3.2.1 | Grammar, STA needs to be plural | Change to "of other STAs of the MLD" |
| 2372 | 126.06 | ﻿35.3.2 | Missing s after STA in "...information of other STA of the MLD..." | insert s after STA |

***Discussion:***



The whole subclause including this paragraph are rewritten by the proposed texts in 21/0254r5.

***Proposed resolution for CIDs 3334, 2520, 2372:***

Revised. This paragraph and the whole subclause are rewritten by the proposed texts in 21/0254r5 (<https://mentor.ieee.org/802.11/dcn/21/11-21-0254-05-00be-cc34-resolution-for-cids-related-to-ml-ie-part-2.docx>).

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 2852 | 147.47 | 35.9.1 | Change "In 6 GHz band" to "In the 6 GHz band" | as per comment |

***Discussion:***



***Proposed resolution:***

Accepted.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 1153 | 126.01 | 35.3.2.1 | Odd name for a subclause. Suggest using something else, e.g., Multi Link Advertisement or something like that. | As in comment. |
| 3424 | 126.01 | 35.3.2 | change "container for multi-link information" to "profile of multi-link information" as the entire clause describes information of ML information (i.e. profile). | as suggested in comment. |

***Discussion:***

The title of the subclause is updated based on CID 2294 as “Advertisement of multi-link information in Multi-Link element”.

***Proposed resolution for CIDs 1153, 3424:***

Revised. Change the title to “Advertisement of multi-link information in Multi-Link element”.

Note to the Editor: This CID is implemented by CID 2294.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 1416 | 126.53 | 35.3.2.2 | were is not correct | change to "was" |
| 2415 | 126.53 | 35.3.2.1 | Minor change. Modify "were to" to "was to". | Please see comment. |

***Discussion:***



The sentence has been edited by CIDs 2241, 2295, and 1035 as follows:



***Proposed resolution for CIDs 1416, 2415:***

Revised. The paragraph at 126.53 in D0.3 is revised as “A reporting STA affiliated with an MLD shall set the Complete Profile subfield of the STA Control field in the Per-STA Profile subelement to 1 if the Per-STA Profile subelement carries complete information (subject to the inheritance rules as defined in 35.3.2.3 (Inheritance in a per-STA profile)) of the reported STA. Otherwise the reporting STA shall set the Complete Profile subfield of the STA Control field in the Per-STA Profile subelement to 0.”.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 1495 | 126.50 | 35.3.2.2 | IS it "Per-STA" or "per-STA" ? Pick one and use it consistently | as in comment. |

***Discussion:***

If the description is related to element/subelement/field/subfield, then it is Per-STA. Otherwise, it is per-STA. For the text of interest shown below, it is Per-STA because the description is about “Per-STA Profile subelement”.



***Proposed resolution:***

Rejected. The capitalization of “Per-STA” for “Per-STA Profile subelement” is appropriate as per the IEEE 802.11 Editor’s Style Guide.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 2200 | 126.44 | 35.3.2.2 Complete or partial per-STA profile | The descprition is in complete, for example a STA of an MLD may provide complete or partial information of other STAs(more than one) of its MLD... | A STA of an MLD may provide complete or partial information of another STA or other STAs of its MLD in the Per-STA Profile subelement(s) of the Basic variant Multi-Link element that it transmits. |
| 2201 | 126.49 | 35.3.2.2 Complete or partial per-STA profile | The STA which was to transmit the frame that carried the Basic variant Multi-Link element is the reporting STA. | A STA of an MLD shall set the Complete Profile subfield of the Per-STA Control field in the Per-STA Profile subelement to 1 if the Per-STA Profile subelement carries all the elements (subject to the inheritance rules as defined in 35.3.2.3 (Inheritance in a per-STA profile)) that would be included if the reporting STA were to transmit the frame that carried the Basic variant Multi-Link element. |
| 2202 | 126.56 | 35.3.2.2 Complete or partial per-STA profile | The descprition is incomplete. | An AP of an AP MLD shall follow the rules defined in 35.3.4.2 (Use of MLD probe request) to include complete or partial profile of another AP or other APs of its MLD in ML Probe Response frame. |
| 2203 | 126.60 | 35.3.2.2 Complete or partial per-STA profile | The descprition is incomplete. | An AP of an AP MLD shall include complete profile of another AP or other APs of its MLD in its (Re-)Association Response frame by following the rules defined in 35.3.5.4 (Usage and rules of Basic variant Multi-link element in the context of multi-link setup). |
| 2204 | 127.01 | 35.3.2.2 Complete or partial per-STA profile | The descprition is incomplete. | A STA of a non-AP MLD shall include complete profile of another STA or other STAs of its MLD in its (Re-)Association Request frame by following the rules defined in 35.3.5.4 (Usage and rules of Basic variant Multi-link element in the context of multi-link setup). |

***Discussion:***

The whole subclause are rewritten by the proposed texts in 21/0254r5.

***Proposed resolution for CIDs 2200, 2201, 2202, 2203, 2204:***

Revised. This paragraph and the whole subclause are rewritten by the proposed texts in 21/0254r5 (<https://mentor.ieee.org/802.11/dcn/21/11-21-0254-05-00be-cc34-resolution-for-cids-related-to-ml-ie-part-2.docx>).

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 2521 | 126.60 | 35.3.2.2 | Sentence seems to imply "another AP shall be included", while the intention seems to be that "rules in 35.3.5.4 shall be followed when another AP is included" | Change to "An AP of an AP MLD shall follow the rules defined in .... when including the profile of another AP in its (Re-)Association Response frame." A similar change is also applicable to the next paragraph for the non-AP STA. |

***Discussion:***





These two paragraphs are rewritten by the proposed texts in 21/0254r5:



***Proposed resolution:***

Revised. Replace the two indicated paragraphs as follows:

An AP affiliated with an AP MLD may include either the complete profile or the partial profile of a reported AP affiliated with the same AP MLD in a transmitted Probe Response frame, which is an ML probe response frame, as defined in 35.3.4.2 (Use of ML probe request and response).

A STA affiliated with a non-AP MLD shall include, in (Re)Association Request frame it transmits, a complete profile of other STAs affiliated with its MLD, that are capable of operating on the links that it is requesting to be part of a multi-link setup (also see 35.3.5.4 (Usage and rules of Basic variant Multi-Link element in the context of multi-link setup)).

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 2752 | 126.21 | 35.3.2.1 | Two kinds of expression meaning the same thing; - (Re)Association - (Re-)Association Use of the same expression is preferred. | (Re)Association or (Re-)Association |

***Discussion:***

As per the 802.11 Editor Style Guide, no hyphen is required.

***Proposed resolution:***

Revised. Replace (Re-) with (Re), and (re-) with (re) throughout the draft amendment.

Note to the Editor: The global change is done in D0.4.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 2856 | 126.44 | 35.3.2.2 | The text "of its MLD" is ambiguous, as it is not always clear what or who "it" is. | Change all occurances of "of its MLD" to "within that MLD". |

***Discussion:***



This paragraph has been revised by CIDs 1034, 1833, 2149, 1861, and 2831 as follows:



***Proposed resolution:***

Revised. Replace the cited paragraph in D0.3 with “An AP affiliated with an AP MLD may include either the complete profile or the partial profile of a reported AP affiliated with the same AP MLD in a transmitted Probe Response frame, which is an ML probe response frame, as defined in 35.3.4.2 (Use of ML probe request and response).”

Note to the Editor: This CID is resolved by CIDs 1034, 1833, 2149, 1861, and 2831.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 2205 | 127.19 | 35.3.2.3 Inheritance in a per-STA profile | The description is confusing. | If any of the elements carried in the frame of the reporting STA are not present in a per-STA profile, the values to be used for the reported STA shall be the same as the values of the corresponding element of the reporting STA unless the element is listed in the Non-Inheritance element (if included) in the per-STA profile for that STA. |
| 1717 | 127.14 | 35.3.2.3 | This sentence is too long and not readable. 'if' appeared four times in the sentence and it is not clear the relationship between them is 'or' or 'and'. | Need to rewrite. |

**Discussion:**



This paragraph has been revised by CIDs 1184, 1185, 2866, 3335, 2309, and 2964 as follows:



**Proposed resolution for CIDs 2205, 1717:**

Revised. Replace the cited paragraph in D0.3 with “In Figure 35-1 (Example of Basic variant Multi-Link element in an Association Request frame), a STA affiliated with a non-AP MLD transmits an Association Request frame which includes Basic variant Multi-Link element that carries the complete profile of two other STAs affiliated with its non-AP MLD (STA x and STA y). The figure expands the Per-STA profile for one of the reported STAs. The Type subfield of the Multi-Link Control field is set to 0 to indicate that the Multi-Link element is a Basic variant Multi-Link element. The Common Info field carries information that applies to the MLD level as described in 9.4.2.295b.2 (Basic variant Multi-Link element). In this example, only the MLD MAC Address field is shown. However, there can be other fields present in the common info portion whose presence is signaled via the subfields in the Multi-Link Control field. Each Per-STA Profile subelement in the Link Info field carries the complete profile, with inheritance applied, of a reported STA affiliated with the non-AP MLD. Each Per-STA Profile subelement carries the STA Control field as the first field, followed by the STA Info field and the STA Profile field. In this example, only the STA MAC Address field is shown. However, there can be other fields present in the STA info portion whose presence is signaled via the subfields in the STA Control field. The STA Profile field carries variable number of fields and elements in the order defined in Table 9-34 (Association Request frame body) with inheritance applied (see 35.3.2.3 (Inheritance in a per-STA profile)).”

Note to the Editor: This CID is resolved by CIDs 1184, 1185, 2866, 3335, 2309, and 2964.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 3425 | 128.37 | 35.3.3 | The Multi-link device addressing should specify the address fields including the address 3 and/or the address 4. But it is missing in this clause. Please specify the rule how to assign A3 and/or A4 for MLD device for transmit and receive. |  |

**Discussion:**

This CID has been resolved by CID 1670 as follows:



Proposed resolution:

Revised. Added the following paragraph at the end of the subclause 35.3.3: “The value of the Address 3 field and the Address 4 field (if present) in the MAC header of a data frame sent over-the-air by a transmitting STA affiliated with the MLD shall be set based on Table 9-30 (Address field contents), where the BSSID is the MAC address of the AP affiliated with the AP MLD corresponding to that link.”

Note to the Editor: This CID is implemented by CID 1670.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 2374 | 128.46 | 35.3.3 | The sentence is grammatically inconsistent. Each AP is singular so address should also be singular. | Change sentence to "If each AP affiliated with an AP MLD has a different MAC address, then when a non-AP MLD is associated with such an AP MLD, each non-AP STA affiliated with the non-AP MLD shall have a different MAC address." |
| 3022 | 128.47 | 35.3.3. | different MAC addresses should be a different MAC address | as in comment |
| 3213 | 128.46 | 35.3.3. | Each AP has only one MAC address. So, it should be "If each AP ... has different MAC address, then...", and "..., each non-AP STA ... shall have different MAC address.". | As shown in the comment. |

***Discussion:***



***Proposed resolution for CIDs 2374, 3022:***

Accepted.

***Proposed resolution for CID 3213:***

Revised.

Replace

If each AP affiliated with an AP MLD has different MAC addresses, then when a non-AP MLD is associated with the AP MLD, each non-AP STA affiliated with the non-AP MLD shall have different MAC addresses.

with

If each AP affiliated with an AP MLD has a different MAC address, then when a non-AP MLD is associated with such an AP MLD, each non-AP STA affiliated with the non-AP MLD shall have a different MAC address.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 3214 | 128.50 | 35.3.3 | Dupoicated field. | Change the first sentence to "The value of the Address 2 (TA) field ...". |
| 3336 | 128.50 | 35.3.3 | "field" is duplicated. | As commented. |
| 2352 | 128.50 | 35.3.3 | one "field" is extra in "Address 2 field (TA) field" | Change to "Address 2 (TA) field" |

***Discussion:***



The sentence is revised by CID 1158 as follows:



***Proposed resolution for CIDs 3214, 2352:***

Accepted.

Note to the Editor: This CID is implemented by CID 1158.

***Proposed resolution for CID 3336:***

Replace “Address 2 field (TA) field” with “Address 2 (TA) field”.

Note to the Editor: This CID is implemented by CID 1158.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 2474 | 128.51 | 35.3.3 | Change "except" to "except for" | As in the comment |

***Discussion:***



***Proposed resolution:***

Accepted.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 2417 | 130.10 | 35.3.4.2 | Minor change. Modify "Link ID" to "link ID" and "per-STA profile" to "Per-STA Profile subelement". | Please see comment. |

***Discussion:***



The issues are addressed by CID 1420 as follows:



***Proposed resolution:***

Accepted.

Note to the Editor: This CID is implemented by CID 1420.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 1043 | 129.55 | 35.3.4.2 | The name needs to be consistent with the rest of the spec. (ML Probe Request/Response versus MLD Probe Request/Response) | Rename the title of the subclause to "Use of ML probe request". Update references within the subclause to ML Probe Request frame and ML Probe Response frame. |

***Discussion:***



This issue is addressed by CIDs 2583 and 3360 as follows:



***Proposed resolution:***

Revised. The title is revises to “Use of ML probe request and response”.

Note to the Editor: This CID is implemented by CIDs 2583 and 3360.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 1745 | 130.04 | 35.3.4.2 | Threre are mixing term of 'MLD probe request' and 'ML probe reqeust' | Take a global search of both terms and align to one word |

***Discussion:***

This issue is addressed by CID 2583 that proposes to replace “MLD probe request” with “ML probe request”.

***Proposed resolution:***

Revised. Replace “MLD probe request” with “ML probe request” throughout the draft amendment.

Note to the Editor: This CID is implemented by CID 2583.