IEEE P802.11
Wireless LANs

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| Proposed resolution for miscellaneous comments on initial SA ballot on D5.0 |
| Date: 2024-02-28 |
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#####

##### This submission present proposed resolutions for the following editorial CIDs:

Clause 1: 22237

Clause 3: 22042, 22199, 22200, 22219

Clause 4: 22004, 22270, 22198, 22011, 22006

Clause 5: 22223

Annex B: 22263

Annex AF: 22387, 22386

Miscellaneous: 22238, 22274, 22275, 22359, 22368, 22371, 22372

##### The proposed changes are based on P802.11be D5.0.

##### Revision history:

##### R0 – Initial version

##### R1 – Deferred CIDs 22219, 22011

##### R2 – Proposed resolution for CID 22011 is updated

##### R3 – Proposed resolution for CID 22219 is updated

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| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 22237 | 1.4 | 49 | 9 | This paragraph could use a few articles. It is better to introduce the sentence with "unless specified otherwise" rather than tag it on at the end. Also, "stated" might be better than "specified" since the cited sentences aren't specifying the meaning of "STA". | Change "Reference in ... unless specified otherwise." to "Unless stated otherwise, a reference in ..." (1st sentence). Change "Reference to ... unless specified otherwise." to "Unless stated otherwise, a reference to ..." (2nd sentence). Change "When referring to MLD management," to "In the context of MLD management," |

***Discussion:***

Original text:

Reference in this standard to “STA” means a “STA” that is not affiliated with a multi-link device (MLD) unless specified otherwise. Reference to “AP” means an “AP” that is not affiliated with an MLD unless specified otherwise. When referring to MLD management, the “SME” is the entity that manages the MLD. A peer MAC entity can be within a STA that is not affiliated with an MLD or an MLD depending on the context. A PeerSTAAddress can be the MAC address of a STA that is not affiliated with an MLD or an MLD MAC address depending on the context.

Proposed revised text:

Unless stated otherwise, a reference in this standard to “STA” means a “STA” that is not affiliated with a multi-link device (MLD). Unless stated otherwise, a reference to “AP” means an “AP” that is not affiliated with an MLD. In the context of MLD management, the “SME” is the entity that manages the MLD. A peer MAC entity can be within a STA that is not affiliated with an MLD or an MLD depending on the context. A PeerSTAAddress can be the MAC address of a STA that is not affiliated with an MLD or an MLD MAC address depending on the context.

***Proposed resolution for CID 22237:***

Accepted

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| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 22042 | 3.2 | 60 | 50 | Multi-Link Probe response is sent by an AP affiliated with an AP MLD. The () has a typo. Delete "non-". | Replace "non-AP" with "AP" in the () |

***Discussion:***

As referred to the text below, the commenter is correct that “an AP multi-link device (non-AP MLD)” should be “an AP multi-link device (AP MLD)”.

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***Proposed resolution for CID 22042:***

Accepted

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| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change |
| 22199 | 3.2 | 59 | 38 | The phrase "single radio" is acting as a compound adjective in this case and should be hyphenated (as is "multi-radio" in EMMLR). | Add hyphen between single and radio here and in other instances of "Enhanced multi-link single radio operation" or "Enhanced multi-link single radio (EMLSR) operation)". |

***Discussion:***

None.

***Proposed resolution for CID 22199:***

Accepted

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22200 | 3.2 | 59 | 35 | Missing conjunction between clauses | Remove comma and add the word "and" to produce "the modulation and coding scheme (MCS) and Nss capabilities in EMLMR mode on the link on which the initial frame was received." |
| 22219 | 3.2 | 59 | 35 | The definition of EMLMR includes the term "EMLMR", which is not very useful. | Delete the text "in EMLMR mode" at the cited reference. |

***Discussion:***

As referred to the text below,

* the commenter of CID 22200 is correct to replace “,” with “and” at line 35.
* the commenter of CID 22219 is correct that it is not very useful to include “in EMLMR mode” at line 35 as the text aims to explain what an EMLMR operation is. Based on the discussion with Liwen and Minyoung, we suggest to replace “in EMLMR mode” with “defined in the non-AP MLD’s EML Operating Mode Notification frame”.

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***Proposed resolution for CID 22200:***

Accepted

***Proposed resolution for CID 22219:***

Revised

Change “in EMLMR mode” to “defined in the non-AP MLD’s EML Operating Mode Notification frame”.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22004 | 4 | 63 | 1 | Printed page numbers jump from 62 to 65 (making the PDF page number and the printed page not match after that point). | Fix the page numbering. |
| 22270 | 4 | 63 | 65 | Pages 63,64 are missing. It seems page number 65 is fixed for the page starting clause 4. | Please fix so the printed page numbers match to page number of the pdf file. |

***Discussion:***

For the draft standard that was used for the initial SA ballot, the PDF with correct page number was used.

***Proposed resolution for CIDs 22004, 22270:***

Rejected.

For the draft standard that was used for the initial SA ballot, the PDF with correct page number was used.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22198 | 4.3.16a | 65 | 10 | The phrase "more than one affiliated APs" should be "more than one affiliated AP" | Remove 's' from end of 'APs' |

***Discussion:***

As referred to the text below, the commenter is correct that “more than one affiliated APs” should be “more than one affiliated AP”.



***Proposed resolution for CID 22198:***

Accepted

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22011 | 4.3.8 | 65 | 42 | "or" should be "and" | In the phrase "PAEs are present on all STAs or all MLDs", change the "or" to an "and" |

***Discussion:***

(Thanks Mark H. and Po-Kai for the discussion)

As referred to the text below (correct location is 63.42), the commenter pointed out that the first sentence reads more correctly (to be what we mean) by using the “and”.

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***Proposed resolution for CID 22011:***

Revised.

Change “PAEs are present on all STAs or all MLDs”

to “A PAE is present on each STA or each MLD”

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22006 | 4.9.6 | 75 | 57 | Add 's' to "one or more affiliated APs" | Plural needed for "one or more" |

***Discussion:***

As referred to the text below (correct location is 73.57), the commenter is correct that “one or more affiliated AP” should be “one or more affiliated APs”.



***Proposed resolution for CID 22006:***

Accepted

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22223 | 5.1.5.1a | 80 | 42 | The text "Non-MLO peer operations" expands up to be "Non Multi-Link Operation peer operations" which is repetitive. | Change "Non-MLO peer operations" to "Non multi-link peer operations". |

***Discussion***

As referred to the text below, the commenter is correct to avoid duplicating the phrase “operation”.



***Proposed resolution for CID 22223:***

Revised

At 80.42, replace “Non-MLO peer operations” with “Non-ML peer operations”.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22263 | B.4.40.1 | 943 | 4 | I think capabilities related to "Large size MRUs for OFDMA" are specified in 36.3.2.2.3.2. | Replace the references for each of EHTP5.2.8-5.2.12 to 36.3.2.2.3. |

***Discussion:***

The commenter is correct that incorrect references were applied to these 5 PICS:

* 36.3.2.6 refers to RU and MRU restrictions for 20 MHz operation
* 36.3.3.1 refers to DL MU-MIMO
* 36.3.3.1.2 refers to Maximum number of spatial streams in an EHT MU PPDU

As pointed out by the commenter, the correct reference is 36.3.2.2.3.2 (Large size MRUs for OFDMA).



***Proposed resolution for CID 22263:***

Revised

For EHTP 5.2.8, EHTP 5.2.9, EHTP 5.2.10, EHTP 5.2.11, and EHTP 5.2.12, replace the respective reference with 36.3.2.2.3.2 (Large size MRUs for OFDMA).

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22387 | AF2.3 | 1012 | 20 | Typo, "notransmitted BSSID" should be "nontransmitted BSSID". | As in comment. |

***Discussion***

As referred to the text below, the commenter is correct about the typo.



***Proposed resolution for CID 22387:***

Accepted

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22386 | AF14.4 | 1038 | 43 | "After receiving Data frames at AP 1, AP 2 and AP 3 transmit Trigger frames to STA 2 and STA 3, soliciting uplink frames transmission, respectively, after receiving Data frames at AP 1." ."after receiving Data frames at AP 1" is duplicate. | Remove "after receiving Data frames at AP 1". |

***Discussion:***

As referred to the text below, the commenter is correct that the phrase “after receiving Data frames at AP1” is duplicated and shall be removed.



***Proposed resolution for CID 22386:***

Accepted

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22238 |  | 1 | 1 | Baseline and amendment order need updating. | Update baseline to reflect expected publication order. Update amendment number. |

***Discussion:***

The commenter is correct for the publication order. As per the discussion in EDITORs meeting, P802.11be is the second amendment of REVme following P802.11ah.

For the baseline reference, P802.11be is using REVme, not IEEE 802.11-2020 and therefore, the phrase “amendment to IEEE P802.11-REVme” is correct. No change is required.

***Proposed resolution for CID 22238:***

Revised

At 1.27, replace “Amendment 8” with “Amendment 2”.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22274 |  |  |  | DL vs downlink. UL vs uplink. DL and UL are defined in 3.5 and they are used much more than downlink and uplink, both in P802.11be D5.0 and in baseline. | Change downlink to DL for those appearing after clause 4 throught the draft. (pp.ll 239.1, 290.38, 290.41, 534.12, 534.23, 534.29, 534.33, 534.37, 625.5, 658.7, 658.13, 658.58, 658.59, 658.60, 659.26, 659.43, 772.55, 865.24 (18 occurences)) Change uplink to UL for those appearing after clause 4 throughout the draft. (pp.ll 239.1, 290.40, 290.42, 534.12, 534.23, 534.29, 534.33, 534.37, 625.6, 658.7, 658.22, 658.60, 658.64, 659.5, 1038.39, 1038.44 (16 occurences)) |

***Discussion:***

None.

***Proposed resolution for CID 22274:***

Accepted

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22275 |  |  |  | TID-To-Link Mapping element vs TTLM element. The function can be expressed as TTLM, but the element name is defined as TID-To-Link Mapping element in 9.4.2.314. So it seems better to unify the element name by TID-To-Link Mapping element. | Change TTLM element to TID-To-Link Mapping element in pp.ll 535.41, 538.14, and 538.15 (3 occurences). |

***Discussion:***

As referred to 535.41, the commenter is correct that “advertised TTLM element” should be “advertised TID-To-Link Mapping element”.



For the sake of consistency, the term “advertised TTLM” should be replaced by “advertised TID-To-Link Mapping element” at 535.40.

As referred to 538.14 and 538.15, the commenter is also correct that “advertised TTLM element” should be “advertised TID-To-Link Mapping element”.



For the sake of consistency, the term “advertised TTLM” should be replaced by “advertised TID-To-Link Mapping element” at 538.9.



***Proposed resolution for CID 22275:***

Revised

Incorporate the changes as shown in <https://mentor.ieee.org/802.11/dcn/24/11-24-0256-01> under CID 22275.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22359 |  | 255 | 17 | [Al Petrick] Table 9-404j - Add period after "true" located in the Encoding column. | As commented |

***Discussion***

As referred to the text below (correct location is 253.17), the commenter is correct that the period is missing.



***Proposed resolution for CID 22359:***

Accepted

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22368 |  | 641 | 24 | [Al Petrick] 20 MHz only is describing a STA (a noun) and requires a hyphen between "20 MHz only". | Change "20 MHz only" to "20 MHz - only" |

***Discussion:***

As referred to the text below, the commenter is correct that “only for 20 MHz only STA” should be “only for 20 MHz-only STA”.



***Proposed resolution for CID 22368:***

Accepted

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22371 |  | 1 | 1 | [Al Petrick] The copyright year needs to be updated on the next release of the draft following the recirculation letter ballot LB280. Change copyright year from 2023 to 2024. | As commented. |

***Discussion:***

None.

***Proposed resolution for CID 22371:***

Accepted.

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| CID | Clause | Page | Line | Comment | Proposed Change |
| 22372 |  |  |  | [Al Petrick] References to P802.11-REVme D3.0 for legacy amendments should be reference D4.1. | Change reference to IEEE 802.11-REVme/D4.1 |

***Discussion:***

IEEE 802.11be D5.0 followed the baseline REVme D3.0, not REVme D4.1.

***Proposed resolution for CID 22732:***

Rejected.

IEEE 802.11be D5.0 followed the baseline REVme D3.0, not REVme D4.1.

Note to the commenter: P802.11be Editor plans to sync up the baseline text after REVme D5.0 is released.