IEEE P802.11
Wireless LANs

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| Comment Resolutions for CID 20973 and CID 20719  |
| Date: 2019-03-28 |
| Author(s): |
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Abstract

This submission provisions with resolutions to CID 20973, CID 20719 and CID 21026 for IEEE P802.11ax D4.0, including suggested spec text modification to IEEE P802.11ax D4.0 to TGax editor:

Revisions:

* R0, comment resolutions initial draft.

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGax Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGax Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGax Editor: Editing instructions preceded by “TGax Editor” are instructions to the TGax editor to modify existing material in the TGax draft. As a result of adopting the changes, the TGax editor will execute the instructions rather than copy them to the TGax Draft.***

--- ***Start of resolution to CID 20973***-----

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| **CID** | **Pg/Ln** | **Clause** | **Comment** | **Proposed Changed** | **Resolution** |
| 20973 |  |  | Re CID 16262: the resolution does not appear to address the point raised in the comment | At 462.12 change from "Enumerated type:" to the end of the cell to "An integer value 0,4, 8, 12 or 16 indicating the PE field duration in <micro>s." | **Rejected** The issue addressed by the comment has been resolved in D4.1 |

**Discussion**

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| **CID** | **Pg/Ln** | **Clause** | **Comment** | **Proposed Changed** | **Resolution** |
| 16262 | 397.56 | 28.2.2 | PE\_DURATION and DEFAULT\_PE\_DURATION are enumerated types with enumeration values, but these enumerated values are not used anywhere, and wording like " with the duration TPE equal to the value specified in the TXVECTOR parameter DEFAULT\_PE\_DURATION." is not clear, since an enumeration value is not a duration | Change to an integer type, with allowed values 0, 4, 8, 12, 16 us | REVISED (PHY: 2018-11-10 11:40:40Z)TGax Editor: please implement the proposed text changes to 802.11ax D3.2 for CID 16262 in 11-18/1759r2 |

CID 16262 was raised against IEEE P802.11ax D3.0 and was resolved in 11-18/1759r2. In 11-18/1759r2, the author agreed with the comment per DEFAULT\_PE\_DURATION part since the parameter DEFAULT\_PE\_DURATION is referred several times in the spec as an absolute value. While parameter PE\_DURATION is not present in TXVECTOR and is optionally present in RXVECTOR, and is never referred to anywhere in the spec. Therefore whether PE\_DURATION is defined as an integer or an enumerated type doesn’t cause any problem to the understanding or implementation of the spec.

From another point, since the parameter DEFAULT\_PE\_DURATION has been defined as an integer, it may make readers comfortable to define the parameter PE\_DURATION in the same way.

--- ***End of resolution to CID 20973***-----

--- ***Start of resolution to CID 20719***-----

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| **CID** | **Pg/Ln** | **Clause** | **Comment** | **Proposed Changed** | **Resolution** |
| 20719 | 302.34 | 26.2.6.3 | Re CID 16014: there are no other methods, since the scrambler seed is not itself transmitted; it only reveals itself  in the what the scrambled Scrambler Initialization field  looks like on the air.  The point is to emphasise that the STA sending the CTS cannot use the SCRAMBLER\_INITIAL\_VALUE in the TXVECTOR as the scranbler seed (despite its confusing name) | After the para at the referenced location add a "NOTE---The TXVECTOR parameter SCRAMBLER\_INITIAL\_VALUE does not contain  the scrambler seed. The scrambler seed to be must be derived  from this parameter." | **Rejected****Reason**The current spec text doesn’t imply to use the parameter directly as the scrambler seed. Instead, the scrambling process is clearly defined in sub-clause 27.3.11.4.  |

**Discussion**

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| **CID** | **Pg/Ln** | **Clause** | **Comment** | **Proposed Changed** | **Resolution** |
| 16014 | 259.57 | 27.2.5.3 | "A non-AP HE STA transmitting a CTS frame in response to an MU-RTS Trigger frame shall set the TXVECTOR parameter SCRAMBLER\_INITIAL\_VALUE to the same value as the RXVECTOR parameter SCRAMBLER\_INITIAL\_VALUE of the received MU-RTS Trigger frame." -- should a NOTE to say this means the scrambler seed cannot be taken directly from the MU-RTS | After the para at the referenced location add a "NOTE---The scrambler seed to be used for the transmission to achieve this must be computed from the received scrambled initialization value." | REJECTED (EDITOR: 2018-11-14 21:33:00Z) - The proposed note is one way of implementation, there could be other method(s) how the Non-AP STA calculate the scrambling sequence when transmitting MU-CTS, the spec does not need to specify one particular method. |

The intention of the sentence addressed by the comment is to specify how to set the parameter SCRAMBLER\_INITIAL\_VALUE in the TXVECTOR of a CTS frame in response to an MU-RTS. This specific operation is to make sure when several intended STAs are sending CTSs as response to a MU RTS, these CTSs from different STAs shall have the same content, including the SERVICE field. The spec doesn’t say the parameter SCRAMBLER\_INITIAL\_VALUE could be directly used as the scrambler seed. Indeed, the scrambling process is defined in 27.3.11.4 (Scrambler). The document 11-18/0754 has addressed a similar comment and the group reached a consensus to modify the parameter name and its definition in TXVECTOR/RXVECTOR as what it is in current spec.

Though the author agrees with the commenter’s understanding of the addressed sentence, the author doesn’t agree to add a note to create and deny a possibility that the original sentence is interpreted in a wrong way.

--- ***Start of resolution to CID 20719***-----

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| **CID** | **Pg/Ln** | **Clause** | **Comment** | **Proposed Changed** | **Resolution** |
| 21026 | 465.1 | 27.2.3 | Re CID 16306: there are various issues with the TRIGVECTOR material | I will supply a commented version of this material to whoever resolves this comment | **Rejected****Reason**The comment fails to provide an implementable modification proposal.  |

**Discussion**

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| **CID** | **Pg/Ln** | **Clause** | **Comment** | **Proposed Changed** | **Resolution** |
| 16306 |  |  | There are various issues with the TRIGVECTOR material | I will supply an annotated version of 18/0823 | REJECTED (PHY: 2018-11-10 11:35:28Z)Reason: the comment fails to provide an implementable modification proposal. |

The commenter failed to provide the material to specify the issue and provide implementable modification of the spec text.

**References:**

1. **IEEE P802.11axTM/D4.0, Feb 2019.**