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**IEEE P802.11**  
**Wireless LANs**

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**SA Ballot PHY CIDs Comment Resolution****Date:** 2024-05-03**Author(s):**

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**Abstract**

This submission proposes comment resolution to 3 PHY CIDs with respect to 11bd from SA Ballot of REVme D5.0: CIDs 7034, 7080, 7081

Proposed changes in this document are with reference to REVme D5.0

## Revisions:

- Rev 0: Initial version of the document
- Rev 1: Updated after discussion of CIDs during TGme telco on May 6<sup>th</sup> 2024
- Rev 2: Updated after discussion of CIDs during TGme PM2 Meeting May 15<sup>th</sup> 2024

Proposed comment resolution

Presented and discussed, no open discussion points

Under discussion

G/T must be satisfied comment

CID	P.L	Clause	Type	Comment	Proposed Change	Resolution
7080	3388.2 6	17.3.2.2	T	11bd modified item e) of this subclause. However, Editor cannot find cited texts. Therefore, changes from 11bd are not incorporated this subclause.	as in comment.	Revised  Comment resolution to CID 602 introduced changes on how the scrambler in 17.3.5.5 in REVme D0.4 is initialized. All the duplicate information on initializing the scrambler has been removed from 17.3.2.2. See <a href="https://mentor.ieee.org/802.11/dcn/21/11-21-1040-03-000m-cc35-scrambler.docx">https://mentor.ieee.org/802.11/dcn/21/11-21-1040-03-000m-cc35-scrambler.docx</a> . See also CID 7034 and 7081 Therefore, the proposed change from 11bd is w.r.t item e) is obsolete.  <b>REVme Editor:</b> Please incorporate the changes in <a href="https://mentor.ieee.org/802.11/dcn/24/11-24-0775-01-000m-sa-ballot-phy-cids-comment-resolution.docx">https://mentor.ieee.org/802.11/dcn/24/11-24-0775-01-000m-sa-ballot-phy-cids-comment-resolution.docx</a>
7034	3388.2 8	17.3.2.2	T	Following editors note in sub clause 17.3.2.2.is unspecific/unclear : "Editor's Note: 11bd modified item e) of this subclause. However, Editor cannot find cited texts. Therefore, changes from 11bd are not incorporated this subclause.". Does this mean that the 11bd scrambling sequence is not fully specified?	Clarify in the note whether the 11bd scrambling sequence is specified correctly even the item e) of sub clause 17.3.2.2 is not changed according to 11bd, or fix the problem with the cited texts and amend item e) according to the the 11bd amendment. Unfortunately the note is not specific enough to understand which citation cannot be found.	Revised  Comment resolution to CID 602 introduced changes on how the scrambler in 17.3.5.5 in REVme D0.4 is initialized. All the duplicate information on initializing the scrambler has been removed from 17.3.2.2. See <a href="https://mentor.ieee.org/802.11/dcn/21/11-21-1040-03-000m-cc35-scrambler.docx">https://mentor.ieee.org/802.11/dcn/21/11-21-1040-03-000m-cc35-scrambler.docx</a> . See also CID 7080 and 7081 Therefore, the proposed change from 11bd is w.r.t item e) is obsolete.  <b>REVme Editor:</b> Please incorporate the changes in

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7081	3402.44	17.3.5.5	T	In 11bd-2022, Note 2 and Note 3 were modified. However, those notes were modified by CID 602. Editor added the following Note 3 and Note 6 to incorporate the changes from 11bd. Please review.	as in comment.	Revised  Comment resolution to CID 602 introduced changes on how the scrambler in 17.3.5.5 in REVme D0.4 is initialized. See <a href="https://mentor.ieee.org/802.11/dcn/21/11-21-1040-03-000m-cc35-scrambler.docx">https://mentor.ieee.org/802.11/dcn/21/11-21-1040-03-000m-cc35-scrambler.docx</a> . See also CID 7034 and 7080  <b>REVme Editor:</b> Please incorporate the changes in <a href="https://mentor.ieee.org/802.11/dcn/24/11-24-0775-01-000m-sa-ballot-phy-cids-comment-resolution.docx">https://mentor.ieee.org/802.11/dcn/24/11-24-0775-01-000m-sa-ballot-phy-cids-comment-resolution.docx</a>

**Discussion CID 7080, 7034, 7081**

802.11bd-2022 is an amendment to 802.11-2020, 802.11ax-2021, 802.11ay-2021, 802.11ba-2021, 802.11-2020/Cor1-2022, and 802.11az-2022

The scrambler operation in 17.3.5.5 (17.3.5.5 PHY DATA scrambler and descrambler) was changed into a single method due to comment resolution of CID 602 in <https://mentor.ieee.org/802.11/dcn/21/11-21-1040-03-000m-cc35-scrambler.docx>. In addition, the comment resolution of CID 602 changed the bullet e) in 17.3.2.2 (Overview of the PPDU encoding process).

Therefore, some of the changes that 802.11bd-2022 introduced w.r.t. the scrambler in Clause 17 have become obsolete, for example the change of item e) in the lettered list in 17.3.2.2 (Overview of the PPDU encoding process). In the following necessary changes w.r.t. REVme D5.0 are presented.

**REVme Editor:**

*Please delete Editor’s Note on P338L29-30*

~~*Editor’s Note: 11bd modified item e) of this subclause. However, Editor cannot find cited texts. Therefore, changes from 11bd are not incorporated this subclause.*~~

*Please revert Figure 17-7 (Data scrambler) to the version in REVme D4.0*

*Please change in Table 17-7 (Contents of the first 7 bits of th scrambling sequence) on P3400L4-20 as follows:*

**Table 17-7—Contents of the first 7 bits of the scrambling sequence**

Parameter	Condition	First 7 bits of scrambling sequence				
		B0	B3	B4	B5	B6

		 Transmit order		
RXVECTOR	VHT STA(#602) <del>(11bd)</del> , or CH_BANDWIDTH_IN_NON_NGV and DYN_BANDWIDTH_IN_NON_NGV are present in RXVECTOR	—	DYN_BANDWIDTH_IN_NON_HT <del>(11bd)(if present) or</del> DYN_BANDWIDTH_IN_NON_NGV (if present)	CH_BANDWIDTH_IN_NON_HT_INDICATOR <del>(11bd) or</del> CH_BANDWIDTH_IN_NON_NGV_INDICATOR (see Table 17-10 (RXVECTOR parameter CH_BANDWIDTH_IN_NON_HT values) and Table 17-11 (RXVECTOR parameter CH_BANDWIDTH_IN_NON_NGV values(11bd)))
<u>RXVECTOR</u>	<u>NGV STA</u>		<u>DYN_BANDWIDTH_IN_NON_NGV</u>	<u>CH_BANDWIDTH_IN_NON_NGV_INDICATOR</u> (see Table 17-11 (RXVECTOR parameter CH_BANDWIDTH_IN_NON_NGV values))

**Please remove the Editor’s Note on P3402L39-41.**

**Please change P3402L48-53 as follows:**

(11bd) NOTE 3—An NGV STA generates RXVECTOR parameter ~~SCRAMBLER\_INITIAL\_VALUE~~ as well as RXVECTOR parameters CH\_BANDWIDTH\_IN\_NON\_NGV and DYN\_BANDWIDTH\_IN\_NON\_NGV when receiving a non-NGV PPDU.

(#602)A non-HE STA ~~(11bd) or non-NGV STA~~ does not generate the RXVECTOR parameter ~~SCRAMBLER\_INITIAL\_VALUE~~.

**Please change P3403L14-18 as follows:**

NOTE 7(#602)(#2160)—Descrambling the DATA field in a STA with dot11OCBActivated not equal to true is the same irrespective of whether any of the TXVECTOR parameters CH\_BANDWIDTH\_IN\_NON\_HT, DYN\_BANDWIDTH\_IN\_NON\_HT, or SCRAMBLER\_INITIAL\_VALUE were present. ~~(11bd)~~. Descrambling the DATA field in a STA with dot11OCBActivated equal to true is the same irrespective of ~~or~~ whether any of the TXVECTOR parameters CH\_BANDWIDTH\_IN\_NON\_NGV or, DYN\_BANDWIDTH\_IN\_NON\_HT\_NGV or ~~SCRAMBLER\_INITIAL\_VALUE~~ were present.