IEEE P802.11  
Wireless LANs

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| |  |  |  |  |  | | --- | --- | --- | --- | --- | | CC35 ERP TX/RXVECTOR Parameters | | | | | | Date: 2021-10-19 | | | | | | Author(s): | | | | | | Name | Affiliation | Address | Phone | email | | Youhan Kim | Qualcomm |  |  | [youhank@qti.qualcomm.com](mailto:youhank@qti.qualcomm.com) | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |

Abstract

This submission proposes resolutions for the following comments from comment collection on P802.11-REVme D0.0:

400

NOTE – Set the Track Changes Viewing Option in the MS Word to “All Markup” to clearly see the proposed text edits.

**Revision History:**

R0: Initial version.

R1: Fix document link.

# CID 400

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** |
| 400 | 18.2 |  | In 18.2 PHY-specific service parameter in D3.0, Youhan found some parameters in 17.x not in 18.x, e.g. SCRAMBLER\_RESET (this was added by 11aq, but only in Clause 17) | Add the missing parameters |

**Discussion**

The Extended Rate PHY (ERP, Clause 18) is mostly defined by merging the DSSS PHY (Clause 15), HR/DSSS PHY (Clause 16) and OFDM PHY (Clause 17).

During some previous discussion in TGmd, it was noted that the TX/RXVECTOR parameters in the ERP does not contain all the TX/RXVECTOR parameters of DSSS, HR/DSSS and OFDM PHYs. Hence, the commenter has submitted this comment.

Here is a summary of which TX/RXVECTOR parameters present in the relevant PHYs. (‘Check’ means present in the respective table.)

**TXVECTOR**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | DSSS PHY  (Table 15-1) | HR/DSSS PHY  (Table 16-5) | OFDM PHY  (Table 17-1) | ERP  (Table 18-1) |
| LENGTH | ✓ | ✓ | ✓ | ✓ |
| DATARATE | ✓ | ✓ | ✓ | ✓ |
| SERVICE | ✓ |  | ✓ | ✓ |
| TXPWR\_LEVEL\_INDEX | ✓ |  | ✓ | ✓ |
| TIME\_OF\_DEPARTURE\_REQUESTED | ✓ | ✓ | ✓ | ✓ |
| TX\_ANTENNA | ✓ |  |  |  |
| PREAMBLE\_TYPE |  | ✓ |  | ✓ |
| CH\_BANDWIDTH\_IN\_NON\_HT |  |  | ✓ | ✓ |
| DYN\_BANDWIDTH\_IN\_NON\_HT |  |  | ✓ | ✓ |
| SCRAMBLER\_RESET |  |  | ✓ |  |
| MODULATION |  |  |  | ✓ |

**RXVECTOR**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | DSSS PHY  (Table 15-2) | HR/DSSS PHY  (Table 16-5) | OFDM PHY  (Table 17-2) | ERP  (Table 18-3) |
| LENGTH | ✓ | ✓ | ✓ | ✓ |
| RSSI | ✓ | ✓ | ✓ | ✓ |
| SIGNAL | ✓ |  |  |  |
| SERVICE | ✓ |  | ✓ | ✓ |
| SQ | ✓ | ✓ |  |  |
| RX\_START\_OF\_FRAME\_OFFSET | ✓ | ✓ | ✓ | ✓ |
| DATARATE |  | ✓ | ✓ | ✓ |
| PREAMBLE\_TYPE |  | ✓ |  | ✓ |
| RX\_ANTENNA |  | ✓ | ✓ |  |
| RCPI |  |  | ✓ |  |
| CH\_BANDWIDTH\_IN\_NON\_HT |  |  | ✓ | ✓ |
| DYN\_BANDWIDTH\_IN\_NON\_HT |  |  | ✓ | ✓ |
| MODULATION |  |  |  | ✓ |

Note that including all the TX/RXVECTOR parameters in DSSS, HR/DSSS and OFDM PHY in the ERP is not straightforward (e.g., received data rate is in DATARATE for HR/DSSS and OFDM, while in SIGNAL in DSSS), and also does not add a lot of value other than just repeating what is already stated in the DSSS, HR/DSSS and OFDM PHY. Hence, the proposed resolution is to add a sentence saying that there are other TX/RXVECTOR parameters in the DSSS, HR/DSSS and OFDM PHY clauses.

**Proposed Resolution: CID 400**

**Revised**.

**Note to Commenter:**

Instead of repeating the same information in ERP, the proposed text update below adds a sentence to clarify that there are additional TXVECTOR and RXVECTOR parameters defined in clauses 15, 16 and 19.

**Instruction to Editor:**

Implement the proposed text updates for CID 400 in <https://mentor.ieee.org/802.11/dcn/21/11-21-1707-01-000m-cc35-erp-tx-rxvector-parameters.docx>

**Proposed Text Updates: CID 400**

18.2 PHY-specific service parameter list

*Instruction to Editor: Update REVme D0.3 P3452L2 as shown below:*

The parameters in Table 18-1 are defined as part of the TXVECTOR parameter list in the PHY-TXSTART.request and PLME-TXTIME.request primitives. The parameters in Table 15-1, Table 16-5 and Table 17-1 are also defined as part of the TXVECTOR parameter list when the TXVECTOR parameter MODULATION is ERP-DSSS, ERP-CCK and ERP-OFDM, respectively.

*Instruction to Editor: Update REVme D0.3 P3453L30 as shown below:*

The parameters in Table 18-3 are defined as part of the RXVECTOR parameter list in the PHY-RXSTART.indication primitive. The parameters in Table 15-2, Table 16-5 and Table 17-2 are also defined as part of the RXVECTOR parameter list when the RXVECTOR parameter MODULATION is ERP-DSSS, ERP-CCK and ERP-OFDM, respectively. When implementations require the use of these vectors, some or all of these parameters may be used in the vectors.

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