**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title | **Text for CID resolutions on D2** | |
| Date Submitted |  | |
| Source | Bober, Kai Lennert Fraunhofer HHI | Voice: [ ] Fax: [ ] E-mail: [ ] |
| Re: |  | |
| Abstract | This document contains text updates for the resolution of comments on draft 2.0 | |
| Purpose | Aid comment resolution | |
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The following clauses contain proposed resolutions for a number CIDs.

Text in red is an instruction to the technical editor.

# CID 591

*Replace all occurrences of the term “CAP-slot” with the term “CAP opportunity (CAPOP)”*

*Replace P23L20-35 with the following text and figure:*

Detection of a failed transmission in the CAP varies with the procedure and may differ from the acknowledgment procedure defined in XXX. How to detect a failed transmission is defined in 5.3.4.2 and 5.3.4.3 respectively.

If a device detects that a CAP transmission failed, the device shall increment the variable *RC*, representing the retry count, by 1 and double the *CW*. *RC*shall initially be 0. *CW* shall be less or equal to *aMaximumCapCw.* The CAP transmission shall ultimately considered as failed, once *RC*exceeds *macCapMaxRetries.*

Figure 10 shows the generic CAP transmission procedure.



**Figure 10(?) Generic CAP transmission procedure**

*Move P24L1-4 to a new paragraph after P36L33*

*Remove P24L5-7*

*Change P24L10-12 as follows:*

If no *Association Response* element is received within *macAssociationTimeout*, the device shall regard the preceding transmission as failed. In that case, the device may reattempt association through sending the *Association Request* element again as described in X. A device shall not attempt association more than *macCapMaxRetries* automatically.

*Change the title of clause 5.3.4.3 as follows:*

**GTS request procedure in the CAP**

*Remove P25L9-11*

*Remove P25L15-P26L2*

# CID 592

Resolved by resolution to CID 591

# CID 630

Change Table 44 as follows:

Table 44 PM-PHY parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Modulation | | PAM with 2, 4, 8 or 16 levels | |
| FEC | | Reed Solomon | |
| Line coding | | 8B10B, HCM(1-3, 4), HCM(1-7, 8), HCM(1-15, 16) | |
| Code Rates | | RS(36,24), RS(256,248) | |
| Clock rate | | 12.5, 25, 50, 100, 200 MHz | |
| Cyclic prefix | | 160 or 1280 ns | |
| OCR | Clock cycle | Data rates with 2-PAM and 8b10b | |
| Min. | Max. |
| 12.5 MHz | 80 ns | 9.6 Mb/s | ? Mb/s |
| 25 MHz | 40 ns | ? Mb/s | ? Mb/s |
| 50 MHz | 20 ns | ? Mb/s | ? Mb/s |
| 100 MHz | 10 ns | ? Mb/s | ? Mb/s |
| 200 MHz | 5 ns | ? Mb/s | 726.6 Mb/s |

# CID 638 (bit-order in PM-PHY)

Add the following text after PXLY:

The PSDU consists of an ordered sequence of octets. Within each octet of the PSDU, the LSB of each octet shall be transmitted first.

Header fields that contain numbers shall be transmitted starting with the LSB first to the MSB last.

# CID <PM-PHY Header>

| Bit | Field | Number of Bits | Description |
| --- | --- | --- | --- |
| B0-B10 | PSDU Length | 11 | The **PSDU Length** scales from 0 up to *aPhyMaxPsduSize* and contains the length of the PSDU in octets. |
| B11 | Short CP | 1 | **Short CP** indicates whether a short cyclic prefix applies to the payload and payload channel estimation. If *Short CP* = 0, the subsequent payload and payload channel estimation field shall have a long cyclic prefix. If *Short CP* = 1, the subsequent payload and payload channel estimation field shall have a short cyclic prefix. |
| B12-B15 | SI | 4 | **SI** contains the initialization data for the payload scrambler as defined in 11.4.1.2. |
| B16-B18 | MIMO PS Num | 3 | **MIMO PS Num** specifies the number of MIMO PS trailing the PHY header. The sequence index for the specific PS to be used is incremented from 1 to NPS in steps of 1. |
| B19-B23 | reserved | 5 | **-** |
| B24-B31 | MCS ID | 8 | The **MCS ID** specifies the MCS used for the payload and is constructed as described in 9.3.3. |