**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title | **Some CID resolutions for D2** | |
| Date Submitted |  | |
| Source | Stephan Berner  PureLiFi | Voice: [ ] Fax: [ ] E-mail: [ ] |
| Re: |  | |
| Abstract |  | |
| Purpose | Aid comment resolution | |
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# CID 619:

*Insert a new subclause “LB-PHY MCS element” after 6.6.20 with the following content:*

The LB*-PHY MCS* element holds a subset of supported MCS for the LB-PHY.

**Figure X LB-PHY MCS element**

|  |  |
| --- | --- |
| **1 octet** | **1 ocet** |
| Clock Rates | MCS |

**Clock Rates:** A bitmap indicating the set of supported OCRs. A 1 in the bitmap indicates that the given OCR is supported. A 0 indicates that the OCR is not supported. Table X1 shows the bitmap structure.

**Table X1 Clock rate bitmap**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | processed first | | | | processed  last | | | | |
| **Bits in the bitmap:** | 0 | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| **Clock Rate:** | 1 MHz | 2 MHz | 4 MHz | 8 MHz | | 16 MHz | 20 MHz | 25 MHz | 1. MHz |

**MCS:** A bitmap indicating a set of supported MCSs. A 1 in the bitmap indicates that the given MCS is supported. A 0 indicates that the MCS is not supported. Table X2 shows the bitmap structure.

Table X2 MCS bitmap

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | processed first | | | | processed last | | | | |
| Bits in the bitmap: | 0 | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| MCS: | 0 | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |

# CID 622:

*Delete the text P68L3-11*

*Change figure 64 as follows:*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 8 octets | 2 octets | 2 octets | 6 octets | 2 octets |
| Timestamp | Random  Access  Interval | Capability  Information | OWPAN  ID | LB-PHY MCS element |

Figure X Random Access element

*Replace P68L22-25 with the following text:*

**LB-PHY MCS element:** The LB-PHY MCS element, defined in XXX, containing the supported clock rates and MCS.

# CID 668:

*Insert the following text after P33L6:*

If the ACK bit in the frame control field is set, then following ACK and retransmission procedure is applied.

*In P33L11, replace* „4“ by *macMaxFrameRetries*

*Insert the following text after P33L12:*

If the ACK bit is not set, the packet is transmitted only one time and the absence of an ACK is ignored.

*Change text in P106L12-13 as follows:*

The sequence number field contains the 12-bit sequence number associated with the MPDU in the payload. Hence, it is equal to the Sequence Number field of the MPDU's Sequence Control field.

# CID 728:

*Replace P14L22 to P14L23, “LB-PHY supports … functionality” as follows.*

The LB-PHY supports MIMO and relaying.

*Replace P96L10 to P96L11, “LB-PHY supports … functionality” as follows.*

The LB-PHY supports MIMO and relaying.

*Delete P100L19 to P100L22, “It contains … the system.*

*Change the first row of Table 54 as follows.*

“Adaptive” *changes to* “Reserved”

“Whether carriers are to be allocated dynamically” *changes to “*Reserved for future use”

*Delete P100L27 to P101L7*

*Delete subclause 10.4.1*

# CID 731:

*Replace P112L18 “The information… “ to P112L23 “… light interference” with the following text:*

Subcarriers with negative indices -28 to -3 are loaded with 24 data symbols and two pilots. The pilots are located at index -21 and -7.

Subcarriers with positive indices 3 to 28 are loaded with the conjugate complex of the data and pilot symbols at the negative indices.

The pilot symbols have all value 1. Subcarriers with indices -2, -1, -1, 2 are set to zero in order to avoid possible low-frequency distortion in the system due to baseline wandering and background light interference.

Subcarriers -31, -30, -29, 29, 30, 31 are set to zero because those are near the bandedge of the lowpass filters in the system and may get attenuated excessively. Subarriers with index 0 (DC) and 32 are also set to zero.