**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |
| --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | **Resolution to CID i-0518** |
| Date Submitted | [12 August, 2019] |
| Source | Frank Leong (NXP Semiconductors)  Billy Verso (Decawave)  Benjamin A. Rolfe (Blind Creek Associates / NXP / UWB Alliance) Brima Ibrahim (NXP Semiconductors) |
| Re: | [If this is a proposed revision, cite the original document.]  [If this is a response to a Call for Contributions, cite the name and date of the Call for Contributions to which this document responds, as well as the relevant item number in the Call for Contributions.]  [Note: Contributions that are not responsive to this section of the template, and contributions which do not address the topic under which they are submitted, may be refused or consigned to the “General Contributions” area.] |
| Abstract | [Resolution to 802.15.4z comment CID i-0518] |
| Purpose | [Resolve 802.15.4z comment CID i-0518] |
| Notice | This document has been prepared to assist the IEEE P802.15. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. |
| Release | The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by P802.15. |

**This document provides a resolution to comment i-0518.**

**The resolution in this document depends on resolutions provided by  
15-19-0262-01-004z-further-hrp-comment-resolutions.docx.**

***Modify rows in Table 11-2 “PHY PIB attributes” as follows:***

**Table 11-2 — PHY PIB attribute**

|  |  |  |  |
| --- | --- | --- | --- |
| **Attribute** | **Type** | **Range** | **Description** |
| *phyHrpUwbPhrDataRate* | Enumeration | DRMDR,  DRBM\_LP,  DRBM\_HP,  DRHM\_LR,  DRHM\_HR | When equal to DRMDR, the data rate is specified by the DataRate parameter of the MCPS-DATA.request primitive.  Otherwise the transmit and receive data rates are selected by this attribute as specified in Table AD1 and Table AD2. |

***Modify 16.2.6 as follows:***

In the BPRF mode, the HRP-~~S~~ERDEV shall use the PHR as specified above3. Optionally, this PHR may be sent and received at the same symbol rate as the data~~.~~ , This is controlled by the phyHrpUwbPhrDataRate attribute, as per table AD1.

**Table AD1 — PHR and PSDU data rates for the HRP-ERDEV in BPRF mode**

|  |  |  |
| --- | --- | --- |
| **Value of the *phyHrpUwbPhrDataRate* attribute** | **PHR data rate** | **PSDU data rate** |
| DRBM\_LP | 975 kb/s (850 kb/s nominal) | 6.8 Mb/s |
| DRBM\_HP | 7.8 Mb/s (6.8 Mb/s nominal) | 6.8 Mb/s |

In the HPRF mode, the HRP-~~S~~ERDEV shall use the PHR as specified in 16.2.6.1. where the data rates of PHR and PSDU are set using the PHY PIB attributes *phyHrpUwbPhrDataRate* and *phyHrpUwbCcConstraintLength*, as specified in Table AD2.

**Table AD2 — PHR and PSDU data rates for the HRP-ERDEV in HPRF mode**

|  |  |  |  |
| --- | --- | --- | --- |
| **Value of the *phyHrpUwbPhrDataRate* attribute** | **Value of the *phyHrpUwbCcConstraintLength* attribute** | **PHR data rate (Mbit/s)** | **PSDU data rate (Mbit/s)** |
| DRHM\_LR | CL3 | 3.9 | 6.8 |
| DRHM\_LR | CL7 | 7.8 | 7.8 |
| DRHM\_HR | CL3 | 15.6 | 27.2 |
| DRHM\_HR | CL7 | 31.2 | 31.2 |

***Insert at the end of 16.3.4 (after Table 33):***

The choice of Data (Symbol) Rate is determined by the *phyHrpUwbPhrDataRate* attribute as specified in Table AD2.