**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | **DraftC comment resolution - Compact Frame MAC primitives - CID 192** |
| Date Submitted | May 12, 2024 |
| Sources | Alex Krebs (Apple)  krebs @ apple.com |
| Re: |  |
| Abstract |  |
| Purpose | To propose resolution for MMS related comments for “P802.15.4ab™/D (pre-ballot) C Draft Standard for Low-Rate Wireless Networks”. |
| Notice | This document does not represent the agreed views of the IEEE 802.15 Working Group or IEEE 802.15.4ab Task Group. It represents only the views of the participants listed in the “Sources” field above.It is offered as a basis for discussion and is not binding on the contributing individuals. The material in this document is subject to change in form and content after further study. The contributors reserve the right to add, amend or withdraw material contained herein. |

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| **Name** | **CID** | **p.** | **Sub-clause** | **l.** | **Comment** | **Proposed Change** | **Proposed Resolution** |
| Billy Verso | 192 | 22 | 8.3.2 | 12 | We have new compact frame type but no API primitives defined to send/report it. I think that the MCPS-DATA primitives may be a good way to do this. | Update MCPS primitives to include ability to send and report reception of compact frames. | Revise. (as shown below) |

***Instructions to the editor: Add to MCPS-DATA.request on p.145 l.13-40 [4me-D01]:***

MCPS-DATA.request (

[...]

CriticalEventMessage,

CompactFrameDescriptor

)

***Instructions to the editor: Add before p.150 l.12 [4me-D01]:***

**Table 8-29---Elements of the CompactFrameDescriptor**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Valid Range** | **Description** |
| CompactFrameID | Unsigned Integer | 0-20 | The frame identifier of the Compact frame. |
| CompactMessageControl | Unsigned Integer | 0x00-0xff | Identifier of the MessageContent of the Compact frame |
| CompactMessageContent | Set of octets | --- | The data to contained in the MessageContent field of the Compact frame |

The CompactFrameID defines the Compact Frame ID to be used and the CompactMessageControl defines what MessageContent is contained in the frame, except for PTData which is defined by Msdu.

***Instructions to the editor: Add to Table 8-27 "MCPS-DATA.request parameters" on p.148 [4me-D01] and change l.17-18:***

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Valid Range** | **Description** |
| ... | | | |
| SendMultipurpose | Enumeration | Frame\_Data, Frame\_Multipurpose, Frame\_Compact | Specifies which frame type is requested. |

If SendMultipurpose is Frame\_Multipurpose, then the Msdu is to be sent using a Multipurpose frame.

If SendMultipurpose is Frame\_Data, then the Msdu is to be sent using a Data frame.

If SendMultipurpose is Frame\_Compact, then the Msdu is to be sent using a Compact frame and the Compact frame is defined using the elements of the CompactFrameDescriptor.

If SrcAddrMode or DstAddrMode is COMPACT, then the SrcAddr or DstAddr contain the Compact Frame address information, and the CompactFrameDescriptor assigns the address information to RPA, InitiatorAddr, and RespAdd fields.

***Instructions to the editor: Add to Table 8-28 "Elements of the DataRequestRangingDescriptor" on p.149 [4me-D01]:***

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Valid Range** | **Description** |
| ... | | | |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

***Instructions to the editor: Change/add entries in Table 8-27 "MCPS-DATA.request parameters" on p.145 [4me-D01]:***

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Valid Range** | **Description** |
| SrcAddrMode | Enumeration | NONE, SHORT, EXTENDED, COMPACT | The source addressing mode for this MPDU. |
| ... | | | |
| DstAddrMode | Enumeration | NONE, SHORT, EXTENDED, COMPACT | The destination addressing mode for this MPDU. |

***Instructions to the editor: Change entries in Table 8-30 "MCPS-DATA.indication parameters" on p.154 [4me-D01]:***

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Valid Range** | **Description** |
| SrcAddrMode | Enumeration | NONE, SHORT, EXTENDED, COMPACT | The source addressing mode for this primitive corresponding to the received MPDU. |
| ... | | | |
| DstAddrMode | Enumeration | NONE, SHORT, EXTENDED, COMPACT | The destination addressing mode for this primitive corresponding to the received MPDU. |