

**IEEE P802.15**  
**Wireless Personal Area Networks**

---

Project	IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)	
Title	<b>P802.15.4 Rev Proposed Comment Resolutions</b>	
Date Submitted	[8 July, 2015]	
Source	[Kunal Shah] [Silver Spring Networks] [ ]	Voice: [ ] Fax: [ ] E-mail: [kshah @ silverspringnet.com]
Re:	[Proposed Comment Resolutions to CID #'s i-280, i-286, i-301, i-406, i-407, i-444]	
Abstract	[Working document]	
Purpose	[Resolve SB received comments]	
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.	

---

## Proposed Comment Resolutions to CID #'s (i-280, i-286, i-301, i-406, i-407, i-444)

### CID i-280

Comment: The PHY Parameter Change IE does not specify how "Effective Time of Change" and "Notification Time" are encoded.

Proposed Change: Add encoded as unsigned integer for the fields.

**Proposed Resolution:** Revise

Change the sentence in sub-clause 7.4.4.13, line 46-51 to,

The Effective Time of Change field is an unsigned integer that shall contain a time in the future, in microseconds, when the change is scheduled to occur.

The Notification Time field is an unsigned integer that shall contain the local time value in the generating device at the time the frame containing the PHY Parameter Change IE is generated.

### CID i-286

Comment: The "FEC Scheme", "Mode field" and "Modulation field" encoding is not specified.

Proposed Change: Add encoded as unsigned integer for the fields.

**Proposed Resolution:** Revise

Include a statement in Clause 4 stating that unless otherwise stated, number encoding is unsigned integers.

### CID i-301

Comment: The encoding of the "Channel Availability starting time" and "Valid time" is not specified.

Proposed Change: The starting time seems to be 8 octet field, no idea what formatting is used. The Valid time seems to refer to figure which has similarly named field.

**Proposed Resolution:** Revise.

Document does specify the detail format of the time field.

Change the sentence from “The Valid Time field indicates the duration of frequency availability as described in Figure 174.” To “The Valid Time field indicates the duration of frequency availability as described in 7.4.4.23.”

**CID i-406**

Comment:

The length of the interleaved PSDU code-bit sequence ( $N_B * N_{\{INTRLV\}}$ ) may not be a multiple of  $x$  for all  $N_B$ , when applying (N,x)-DSSS with  $x = 4$  or  $x = 8$ . The interleaver depth  $N_{\{INTRLV\}}$  of 126 was deliberately chosen to be close to 128 but not exactly 128. The degree was deliberately chosen to be a prime. Appending a small number {2 or 4 or 6} of additional pad bits to the whole interleaved PSDU code-bit sequence solves the issue.

Proposed Change:

At section 22.3.4 add, "When applying (N,4)-DSSS, the sequence of interleaved PSDU code-bits shall be extended by appending a minimum number of pad bits, such that the length of the extended interleaved PSDU code-bit sequence is a multiple of 4. The pad bits shall be set to zero."

At section 22.3.5 add, "When applying (N,8)-MDSSS in conjunction with FEC, the sequence of interleaved PSDU code-bits shall be extended by appending a minimum number of pad bits, such that the length of the extended interleaved PSDU code-bit sequence is a multiple of 8. The pad bits shall be set to zero."

**Proposed Resolution:** Accept

**CID i-407**

Comment: If there are any custom command frames required, there is need for command identifier. Having a vendor specific command frame would solve this problem.

Proposed Change: Define vendor specific command frame with vendor OUI and vendor specific information.

**Proposed Resolution:** Revise

As per doc#15-556-00

**CID i-444**

Comment: MR-FSK Generic PHY IE is defined but not used

Proposed Change: Define the method by which the Generic PHY IE is used, perhaps in conjunction with PHY change.

**Proposed Resolution:** Revise

Change the sentence in 20.3 sub-clause, page 446, line 47 from, “The set of PHY operating mode parameters is defined by the SUN FSK Generic PHY Descriptor IE, as defined in 7.4.4.11.” to “The set of PHY operating mode parameters is defined by the SUN FSK Generic PHY IE, as defined in 7.4.4.11.”