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### Project: IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)

Submission Title: [Comment resolutions for SFD]

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Abstract: [This document provides resolutions to comments for SFD]

**Purpose:** [This document provides resolutions to comments of LB51]

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- <u>Comment</u>: Distinguish between 2-FSK and 4-FSK in Table 27 or remove the "symbols" column entirely, since each PHY has a unique way of converting from octets to symbols anyway..
- <u>Response:</u> Accept in principle
- <u>Resolution</u>: Change Table 27 to

### Table 27—SFD field length

РНҮ	Length	
MR-FSK	2 octets	16 bits

- <u>Comment:</u> Recommend that a guideline be produced to help distinguish between bits, symbols and also bits/s coded or uncoded.
- <u>Response:</u> Accept
- <u>Resolution:</u> Guide line will be provided by Gilb. Resolved as CID829

- <u>Comment</u>: First sentence: "The MR-FSK SFD field consists of 2 bytes"

   (1) "octet" is the appropriate term for 8-bit entity, and (2) 2 octets is the same as 16 bits as stated in the next sentence, so the first sentence is redundant.
- <u>Response</u>: Accept
- <u>Resolution:</u> Change the text to 'The SFD used by the MR-FSK PHY shall be a 16-bit sequence selected from the list of values shown in Table 28a.' by deleting the first sentence

- <u>Comment:</u> Change table 28a so col 1 says "not FEC coded" and "FEC coded"; Remove PIB attribute phyMRFSKSFD.
- <u>Resolution:</u> resolved by comment 845

- <u>Comment:</u>. Delete sentence.
- <u>Response: A</u>ccept in principle
- <u>Resolution:</u> change the text to 'The SFD used by the MR-FSK PHY shall be a 16-bit sequence selected from the list of values shown in Table 28a. All devices shall be capable sending and receiving the SFD for uncoded PSDU+PHR as shown in Table 28a when phyMRFSKSFD=0. Devices which support FEC shall be capable of transmitting and receiving the SFDs for both coded and uncoded PSDU+PHR as shown in Table 28a when phyMRFSKSFD=0. The SFD values shown in Table 28a when phyMRFSKSFD=1 are optional for all devices. The SFD is transmitted starting from the leftmost bit.'

# SFD CID 845, 846, 847

### • <u>Comment:</u>.

Remove the second row of table 28a(845)

If a second SFD is necessary it should use the same RX structure as the first(846) Remove optional pair of SFDs (associated with a value of phyMRFSKSFD == 1)

- (847)
- <u>Resolution</u>:TBD

# SFD CID 848, 1117, 1119

#### • <u>Comment:</u>.

The parameter phyMRFSKSFD shows which SFD to transmit, but does it signal which SFD pair to search for? - or must the RX search for all 4 SFD's(848)

This seems to be unnecessary complexity. It should be only one set of values not two or more. Suggest to select only one set and adopt it.(1117)

If a second SFD is necessary it should use the same RX structure as the first (1119)

- <u>Response:</u> Accept in principle
- <u>Resolution:</u> resolved by comment 845

- <u>Comment:</u>. rename the attribute as "phySUNMRFSKMode"
- <u>Response:Reject</u>
- <u>Resolution:</u>The atrribute "phySUNMRFSKSFD" defines which SFD pair to be used. It is not to specify "Mode". It would be fine to change to "phySUNMRFSKSFD".