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

Submission Title: [Comment Resolution for CIDs 446, 448, and 452]

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Re: [Response to LB50 comments]

Abstract: [This document describes the comment resolution for CIDs 446, 448, and 452]

Purpose: [To resolve the LB technical comments of CIDs 446, 448, and 452]

Comment Resolution
for CIDs 446, 448, and 452

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CID 446 related to 4B6B

CID	Name	Clause	Subclause	Page	Line	Comment	Suggested Remedy
446	R. Roberts	6.6.4.1		51	34	Remove text phrase	Remove the phrase "with 50% duty cycle". What is meant is the 6 bit code is DC balanced. We could say "with DC balance".

- "The 4B6B expands 4-bits to 6-bit encoded symbols with 50% duty cycle."
    - 4B6B code is independent of VPPM dimming.
    - "50% duty cycle" means only that the counts of 1 and 0 in a 4B6B encoded symbol are always the same.
    - However, the use of "duty cycle" terminology has some problems because it cause a confusion between the same terminologies of "duty cycle" used in 4B6B and VPPM.
    - So the terminology of "duty cycle" has been removed in 4B6B description.
- CID 446 : Accept
- The 4B6B expands 4-bits to 6-bits encoded symbols with DC balance in which the counts of 1 and 0 are always the same.

CID 448 related to 4B6B

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy
448	David Cypher	6	6.6.4.1	52	27	What is Run Length is limited 4? Is 4 to be there?	Run length is limited to four

- "Run length is limited 4"
- An English grammar problem
- CID 448 : Accept as a suggested remedy
  - "Run length is limited to four"

CID 452 related 4B6B

CID	Name	Clause	Subclause	Page	Line	Comment	Suggested Remedy
452	R. Roberts	6.6.4.1	Figure 35	52		Delete figure 35	Figure 35 discusses some issues that are irrelevant to the standard, such as NRZ OOK (since NRZ OOK is not in the standard) and the illustrative examples really do not add value to what is already in table 27.

- NRZ-OOK is not related to 4B6B and this standard.
- CID 452 :Partially accept
  - Delete only NRZ-OOK
  - Add 25% (editorial CID 344)
  - Add the words of bit "1" ratio to express more exactly.
  - No-encoded data → non-encoded data
  - Change the figure title
    - Figure 35 – Illustrative comparison between non-encoded symbols and 4B6B encoded symbols

Figure 35—An example of 4B6B with NRZ OOK