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

Submission Title: [LB50 comment resolution related to subclause 6.6]
Date Submitted: [July, 2010]
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Re: [Response to LB50 comments]

Abstract: [This document describes a LB50 comment resolution related to subclause 6.6]

Purpose: [Proposal to resolve LB50 comments]

LB50 comment resolution related to subclause 6.6

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CID 421, 425, 429, 430 and 435a

- Comments
  - resolve Editor's Note
    - [Ed. Note: T-CID46 in doc 10/47r6 indicated that 5 kbps may not be satisfactory for PHY 1 link establishment... this issue was never closed and still needs to be addressed]
  - define mandatory data rate for link establishment
- Already resolved by doc 10/0342/r3
- Resolution/Instruction to editor
  - CID 421: Accept in principle, see doc 10/0342/r3 slide 3 and 4
  - CID 425, 429, 430 and 435a: Accept, see doc 10/0342/r3 slide 5

CID 427

CID	Name	Clause	Subclause	Page	Line	Comment	Suggested Remedy
427	Michael Schmidt	6.6		47		Which part of the PPDU is processed by the blocks given in Figure 28, 36 and 38? Is the SHR sufficiently long, such that the processing and coding gain introduced by FEC (RS + CC) can be utilized?	Clearly describe which part of the PPDU is subject to the FEC blocks, usually the PSDU and / or PHR field.

- Resolution/Instruction to editor
  - Accept
    - Need to describe that PSDU is subject to the FEC blocks
    - PHY I can use the RS encode, interleaver, puncture, convolutional code and RLL code which are (effected, applied, ..) to PSDU, not PHR field.
      - Add to the first line of subclasue 6.6.1

CID 433

CID	Name	Clause	Subclause	Page	Line	Comment	Suggested Remedy
433	R. Roberts	6.6.1		47		confusion on figure 28	In figure 28 there is a block called puncture. Referring to the 4 step process shown at the top of page 48, is the puncture of figure 28 the same as the "delete the padded zeros" of step iii?

- In coding theory, puncturing is the process of removing some of the parity bits after encoding with an error-correction code.
- Resolution/Instruction to editor
  - Reject
  - 4 steps are related to RS encoder in figure 28(subclause 6.6.2). “Puncture” is explained at page 50 line 38 to Page 51 line 27 (end of subclause 6.6.3)

CID 463

CID	Name	Clause	Subclause	Page	Line	Comment	Suggested Remedy
463	R. Roberts	6.6.5		53		Add a sentence to the text in 6.6.5	Add the following sentence after the current sentence … "The extinction ratio is at the discretion of the implementer". The reason this is added is because to send a logic zero, it is not necessary to completely extinquish the LED light … it could be just slightly dimmed for a logic zero. Not specifying the extinction ratio allows the implementer to lessen the flicker effect by not doing 100% AM modulation.

- Same comment with CID 469
  - Different section but same contents about symbol to optical mapping
- Resolution/Instruction to editor
  - Accept, see CID 469
  - CID 469: Accepted - also modify the existing text in this section by deleting the words "logic" in two places.