

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

Submission Title: [Comment resolutions related to OOK and DAMI modes in DF04]

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Abstract: [Resolutions to Comments on OOK and DAMI modes in DF04]

Purpose: [This document provides a list of the editing staff that will be working on 802.15.3c.]

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CID #2

CID	Clause	Sub clause	Page	Line	Type	Comment	Suggested Remedy
2	12	12.2.8	101	24-26	T	At Table 121, why does OOK and DAMI adopt pilot word length of 64? This pilot word with length of 64 in 12.2.3.4.1 is modulated using Pi/2-BPSK. OOK pilot word design is described as in D2.5.	Change back the data rate calculation. For OOK, the OOK pilot word design as in D2.5 can be used for data rate calculation.

- The Table 121 for optional OOK and DAMI modes adopts pilot word length of 64 in D04. However, DAMI transmits pilot word length of 4 for each subblock length of 512, and OOK pilot word design is described as in D2.5.
- The pilot word with length of 64 is defined in 12.2.3.4.1 and modulated by Pi/2-BPSK.
- **Recommended resolution:**
 - **Accept suggested resolution by modifying the data rates for DAMI and OOK as in the next slide.**

CID #2

Table 121—MCS dependent parameters for optional OOK/DAMI modes

Device Type	MCS identifier	Data rate ^a (Mb/s)	Modulation	Spreading factor	FEC type	Support for CMS
PNC capable DEVs	OOK	25.3 (CMS)	p/2-BPSK/ (G)MSK	64	RS(255,239)	Mandatory
		803	OOK	2		
		1610		1		
	DAMI	25.3 (CMS)	p/2-BPSK/ (G)MSK	64		
		3210	DAMI	1		
Non-PNC capable DEVs	OOK1	803	OOK	2	RS(255,239)	Not mandatory
		1610		1		
	DAMI	3210	DAMI	1		

^a Data rate of CMS is calculated similar to Table 98. Data rates of two OOK modes are calculated based on pilot word design as in D2.5. Data rate of DAMI mode is calculated based on subblock length of 512 and pilot word length of 4.

CID #73

CID	Clause	Sub clause	Page	Line	Type	Comment	Suggested Remedy
73	12	12.2.8	66	17	T	DAMI and OOK are inefficient.	Remove section 12.2.8

- As discussed in previous meetings, OOK/DAMI modes are designed for low complexity and low power consumption.
 - OOK mode can adopt the simplest envelope detection for low complexity, power consumption and cost implementation.
 - DAMI is for high data rate applications, and offers low power consumption and complexity.
- It is not clear what kind of efficiency CID#73 refers to.
- **Recommended resolution:**
 - **Reject comment #73**