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### doc.: IEEE 802.15-10-0522-00-004g

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

Submission Title: [Comment resolutions for FSK]

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**Abstract:** [This document provides resolutions to comments for FSK]

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

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• <u>Comment:</u>

Document/table says: "phyFSKFECInterleaving", Is this parameter used only by FSK?

- <u>Response</u>:
  - The parameter is only used by FSK
- No resolution required.

- <u>Comment:</u>
  - The section on the MR-FSK PHY in sub-clause 6.12a requires further clarification, e.g. there is missing the initial state of the memory registers used in the FEC, it is unclear how bits map to coded/interleaved bits, superscripts and subscripts appear swapped at time, etc.
- <u>Response</u>: Accept in principle
- <u>Resolution:</u>
  - Resolved by revised document 15-10-0266-03

### • <u>Comment:</u>

SHR shall never be sent in 4(G)FSK modulation, and it should be avoided for PHR as well.

### • <u>Response</u>:

The comment shall be under 'preamble' category, it has been resolved by Document number 15-10-401-00 provided by Yasukawa-san

- <u>Comment:</u> Except for here, the rest of the draft maps a "00" symbol to the largest negative output (voltage or deviation), and Grey codes the remaining mappings. This is an established encoding also used in 802.11.
- <u>Response</u>: Accept
- <u>Resolution</u>: change the table for bit to symbol mapping as

FSK/GFSK	
Symbol (binary)	Deviation * ∆f
0	-1
1	+1
4FSK/4GFSK	
Symbol (binary)	Deviation * ∆f
00	-3
01	-1
11	+1
10	+3

- <u>Comment:</u> Block diagram in Figure 65a is incomplete, since FEC and Data Whitening are missing.
- <u>Response:</u> Accept in principle
- <u>Resolution:</u> Resolved by Document 15-10-0356-02