

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

Submission Title: [Discussion on the initial SB comments No.125 and 157]

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Re: [Response to the initial SB for the IEEE 802.15.7 standard]

Abstract: [This document describes some discussion points on the initial SB comments No.125 and 157]

Purpose: [To provide some discussion points on the initial SB comments No.125 and 157]

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Discussion on the initial SB comments No.125 and 157

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Comment No.125 and 157

Comment No.	Name	Page	Subclause	Line	Comment	Proposed Change
125 (line 28)	Chaplin, Clint	8	4.4	46	"The value of 'm' is one for PHY I, II and three for PHY III"	"The value of 'm' is one for PHY I and PHY II and three for PHY III"
157 (line 128)	Chaplin, Clint	235	9.2.9	44	"PHY I, II and 3 for PHY III"	"PHY I and PHY II and 3 for PHY III"

- Simple and editorial issues
- Correct

Discussion point on 125 and 157 (1)

- The discussion point is just the definition of 'm' on 'n x m'.
- 'm' is the number of possible **independent data streams from the PHY**.
- Independent data streams may exist on the logical channel as well as physical channel. So, we need to define the definition of 'm' more exactly.
- So far, the definition change of 'm' to '**the number of distinct wavelength source**' has been suggested as a best solution.
- Good solution to PHY III.

Discussion point on 125 and 157 (2)

- If the definition of 'm' is the number of distinct wavelength source, then is it impossible to use the multiple distinct wavelength sources on PHY type I and II ?
- We can use multiple distinct wavelength source to modulate the same data simultaneously in PHY I and II.
- **Recommendation**
 - We need not to limit the 'm' value on PHY I and II to '1' if we define 'm' is the number of distinct wavelength source.
 - Open discussion