IEEE P802.11
Wireless LANs

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| Proposed resolution to CID 506, 508, 509, 510, 511, 512, 513 and 514 in LB223 |
| Date: 2016-11-07 |
| Author(s):  |
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 Abstract

This document proposes resolutions to 8 CIDs on TGaj D3.0: 506, 508, 509, 510, 511, 512, 513 and 514.

**Revision History**

R0: Initial version.

**General comments:**

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| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 508 | 25.1.1 | 162 | 18 | G | "A control modulation using CDMG MCS 0 of the CDMG Control mode defined in 25.4." All MCSs defined in clause 25 are applicable for CDMG STAs. So it is redundant to use "CDMG MCS ... ". Remove "CDMG" here. | Change to "A control modulation using MCS 0 of the CDMG Control mode defined in 25.4." Do the same throughout clause 25. |  |

Proposed resolution: **Accepted**

Change to "A control modulation using ~~CDMG~~ MCS 0 of the CDMG Control mode defined in 25.4." Do the same throughout clause 25.

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| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 508 | 25.1.1 | 162 | 26 | G | "All these modulation methods share a common preamble (see 25.3.6 (Common preamble))." In order to keep consistent with the corresponding description in REVmc7.0, propose to change to "All CDMG modulation methods share a similar preamble (see 25.3.6 (Common preamble))." | Change to "All CDMG modulation methods share a similar preamble (see 25.3.6 (Common preamble))." |  |

Proposed resolution: **Accepted.**

In order to keep consistent with the corresponding description for DMG STA in REVmc7.0, change to "All CDMG modulation methods share a ~~common~~ similar preamble (see 25.3.6 (Common preamble)).

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| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 508 | 25.4.3.2.1 | 172 | 29 | G | In order to keep consistent with the corresponding descriptions in REVmc7.0, change the field name from "Reserved" to "Differential encoder initialization" and change the corresponding description from "Differential detector initialization" to "Used to initialize the differential encoding." | As per comment. |  |

Proposed resolution: **Accepted.**

In order to keep consistent with the corresponding descriptions for DMG STA in REVmc7.0, change Table 25-6 as follows:

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| Table 25-6 Control mode header fields  |
| Field name | Number of bits | Starting bit | Description |
| Differential encoder initialization ~~Reserved~~ | 1 | 0 | Used to initialize the differential encoding. ~~Set to 0 (differential detector initialization).~~ |
| … | … | … | … |

**Editorial comments:**

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| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 506 | 25.3.1 | 165 | 33 | E | The mandatory channel numbers for 1.08GHz band (5,6) in text should be changed as the equation has been changed. | The CDMG PHY operates in the channels defined in Annex E and shall support at least channel number 2, 35 and 36. |  |

Proposed resolution: **Accepted.**

The equation of the channel center frequency has been changed in D3.0, so change the paragraph at P165L33 accordingly as follows:

“The CDMG PHY operates in the channels defined in Annex E and shall support at least channel number 2, 35 and 36.”

**Technical comments:**

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| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 510 | 25.3.4 | 168 | 20 | T | "3054.5 ns=21× Tseq". The value of TSTF (Detection sequence duration) shall be 2618.2 ns=18× Tseq. | Change to "2618.2 ns=18× Tseq". |  |
| 511 | 25.3.4 | 138 | 29 | T | "7.5636 μs=52× Tseq". The value of TSTF-CP(control mode short training field duration) shall be 7.2727 μs=50× Tseq. | Change to "7.2727 μs=50× Tseq". |  |

Proposed resolution: **Accepted.**

Correct the errors in the table 25-11 as follows:

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| Tale 25-4 Timing-related parameters  |
| **Parameter** | **Value** |
| *…*  | … |
| *TSTF*: Detection sequence duration | 2618.2 ns=18× *Tseq* ~~3054.5 ns=21×~~ *~~T~~~~seq~~* |
| *TSTF-CP:* (control mode short training field duration) | 7.2727 μs=50× *Tseq* ~~7.5636 μs=52× Tseq~~ |
| *…* | *…* |

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| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 513 | 25.11 | 185 | 37 | T | The CDMG PHY MIB attributes are not exactly as the same as DMG PHY MIB attributes. It is better to clearly define them in Clause 25 in reference to 20.12 (DMG PLME). | As per comment. |  |

Proposed resolution: **Revised.**

***Insert subclause 25.11 (CDMG PLME) as follows:***

**25.11 CDMG PLME**

**25.11.1 PLME SAP sublayer management primitives**

Table 25-13 (CDMG PHY MIB attribute default values) lists the MIB attributes that may be accessed by the PHY entities and the intra-layer of higher level LMEs. These attributes are accessed via the PLME-GET, PLME-SET, PLME-RESET, and PLME-CHARACTERISTICS primitives defined in 6.5 (PLME SAP interface).

**25.11.2 CDMG PHY MIB**

All DMG PHY MIB attributes are defined in Annex C, with specific values defined in Table 25-13 (CDMG PHY MIB attribute default values). The column titled “Operational semantics” in Table 25-13 (CDMG PHY MIB attribute default values) contains two types: static and dynamic. Static MIB attributes are fixed and cannot be modified for a given PHY implementation. Dynamic MIB attributes can be modified by some management entity.

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| **Table 25-13 CDMG PHY MIB attribute default values(11ad)** |
| **Managed object** | **Default value/range** | **Operational semantics** |
| **dot11PHYOperationTable** |
| dot11PHYtype | CDMG | Static |
| **dot11PHYCDMGTable** |
| dot11LowPowerSCPHYImplemented | Boolean | Static |
| dot11LowPowerSCPHYActivated | Boolean  | Dynamic |

**25.11.3 TXTIME calculation**

The value of the TXTIME parameter returned by the PLME-TXTIME.confirm primitive shall be calculated according to the following equations.

For the CDMG SC PHY (*NTRN* is Training Length field defined in the header – see, for example, Table 25-8 (CDMG SC mode header fields)):

where*α=*aBRPminSCblocks, β=aSCBlockSize, γ=aSCGILength, and.

For the CDMG control PHY:



where *NCW* calculation is defined in 20.4.3.3.3 (Encoder).

**25.11.4 CDMG PHY characteristics**

The static CDMG PHY characteristics, provided through the PLME-CHARACTERISTICS service primitive, shall be as shown in Table 20-32 (DMG PHY characteristics) except the following parameters defined in Table 25-14 (CDMG PHY characteristics)(Ed).

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| **Table 25-14 CDMG PHY characteristics** |
| **PHY parameter** | **Value** |
| aDataPreambleLength | 3927 ns |
| aControlPHYPreambleLength | 8582 ns  |
| aPPDUMaxTime | 4 ms |
| aPSDUMaxLength | 262 143 octets |

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| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 514 | 25.5.3.1.2 | 176 | 65 | T | In order to keep consistent with the corresponding descriptions in REVmc7.0, change "MCS 9 and below are mandatory for each Tx and Rx of a device" to "Transmit and receive support for MCS 9 and below is mandatory.". | As per comment. |  |

Proposed resolution: **Accepted.**

Change "MCS 9 and below are mandatory for each Tx and Rx of a device" to "Transmit and receive support for MCS 9 and below is mandatory."