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

Submission Title: [proposed resolutions about comments CID 244 and more]

Date Submitted: [July 07. 2009]

Source: [Taehan Bae, Jaeseung Son, Sridhar Rajagopal] Company [Samsung Electronics Co.,LTD]
Address [Dong Suwon P.O. Box 105, 416 Maetan-3dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, 443-742 Korea]
Voice:[82-31-279-7293], FAX: [82-31-279-5130], E-Mail:[taehan.bae@samsung.com]

Re: []

Abstract: [Proposed resolution about comment CID 244 and more and helping discussion]

Purpose: [Contribution to IEEE 802.15.7 TG-VLC]

Proposed resolutions of CID 244 and more
(244, 576, 584, 585, 586, 623, 628, 629, 630, 633, 636, 664, 668, 674, 675, 766)

2010. 07.07

Samsung Electronics

Technical comment CID 244

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy		
244	Clint Chaplin	6	6.1.4	25		(JS) Where is section 6.1.4 from? In D0 document, there is no Minimum LIFS and SIFS periods section.		Sridhar	requires discussion.

❖ Current contents list

6.PHY sublayer specification

    6.1 General requirements and definitions

        6.1.1 Operating wavelength range

        6.1.2 Operating frequency range and channel assignments

        6.1.3 Operating modes

        6.1.4 Minimum LIFS and SIFS periods

          The minimum LIFS and SIFS periods for each of the PHYs are shown in Table 5. The description, use, and illustration of LIFS and SIFS is shown in Figure 107 (section 7.6.1.4).

❖ Suggested remedy

    ▬ There is no suggested remedy from commentator.

    ▪ Technical Editor need to do nothing.

    ▦ Need some explain in excel file.

        ◆ Those (LIFS, SIFS) are used in several place, for example, MAC PIB attributes (Table 85), sub-clause 7.6.1.2 Data transmission modes. So, general explain about LIFS and SIFS seems necessary in sub-clause 6.1.

Technical comment CID 576

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy		
576	David Cypher	7	7.1.1.3.1	72	9	0x01 is reserved in Table 30, so how can it not be for Table 32?	Fix inconsistency	Sridhar_2	

❖ **Suggested Remedy**

\- accept

\- Technical editor

In table 32,

change the

"**0x01 = no address field (broadcast only mode with no address fields present)**"

Into

"**0x01 = reserved.**" same as table 30

Table 30—MCPS-DATA.request parameters

Name	Type	Valid range	Description
SrcAddrMode	Integer	0x00–0x03	The source addressing mode for this primitive and subsequent MPDU. This value can take one of the following values: 0x00 = no address (addressing fields omitted, see 7.2.1.1.8). 0x01 = reserved. 0x02 = 16-bit short address. 0x03 = 64-bit extended address.

Table 32—MCPS-DATA.indication parameters

Name	Type	Valid range	Description
SrcAddrMode	Integer	0x00–0x03	The source addressing mode for this primitive corresponding to the received MPDU. This value can take one of the following values: 0x00 = no address (addressing fields omitted). 0x01 = no address field (broadcast only mode with no address fields present). 0x02 = 16-bit short address. 0x03 = 64-bit extended address.

Technical comment CID 584

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy		
584	David Cypher	7	7.1.3.1.1	77	7	Wrong reference 6.1.4	Unknown	Sridhar_2	Fix the reference

❖ There's some mistake about reference number (See below) in table 36.

❖ It seems happened from previous version, D0 document.

❖ **So suggested remedy is:**

❖ **accept:**

❖ **Ref 6.1.2 is correct.**

❖ **Technical Editor:** Change "see 6.1.4" into "see 6.1.2" in table 36

Table 36—MLME-ASSOCIATE.request parameters

Name	Type	Valid range	Description
LogicalChannel	Integer	Selected from the available logical channels supported by the PHY (see 6.1.4).	The logical channel on which to attempt association.

Technical comment CID 585

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy		
585	David Cypher	7	7.1.4.3.1	88	36	Is it DevicePANId as here or DeviceWPANId as in Table 42	Fix inconsistency	Sridhar_2	Fix inconsistency

❖ **So suggested remedy is: accept:**

❖ **Technical Editor:** Change "DevicePANID" into "DeviceWPANId"

7.1.4.3.1 Semantics of the service primitive

The semantics of the MLME-DISASSOCIATE.confirm primitive are as follows:

```
MLME-DISASSOCIATE.confirm    (
                    status,
                    DeviceAddrMode,
                    DevicePANId,
                    DeviceAddress
                    )
```

Table 42 specifies the parameters for the MLME-DISASSOCIATE.confirm primitive.

Table 42—MLME-DISASSOCIATE.confirm parameters

			disassociate by its coordinator.
DeviceWPANId	Integer	0x0000–0xffff	The WPAN identifier of the device that has either requested disassociation or been instructed to disassociate by its coordinator.
DeviceAddress	Device	As specified by the	The address of the device that has

Technical comment CID 586

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy		
586	David Cypher	7	7.1.5.1.1	91	37	Table 44 Wrong reference 6.1.4	Unknown	Sridhar_2	Fix the reference

❖ There's some mistake about reference number (See below) in table 44 , same as result of CID 584

❖ **So suggested remedy is: accept:**

❖ **Ref 6.1.2 is correct.**

❖ **Technical Editor:** Change "**see 6.1.4**" into "**see 6.1.2**" in table 44.

Table 44—Elements of WPAN Descriptor

Name	Type	Valid range	Description
LogicalChannel	Integer	Selected from the available logical channels supported by the PHY (see 6.1.4)	The current logical channel occupied by the network.

Technical comment CID 623

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy		
623	David Cypher	7	7.1.14.2.1	123	7	Wrong reference 6.1.4	Unknown	Sridhar_2	

- ❖ There's some mistake about reference number (See below) in table 62.

- ❖ It seems happened from previous version, D0 document. It's same result of CID 584

- ❖ **So suggested remedy is: accept:**

- ❖ **Ref 6.1.2 is correct.**

- ❖ **Technical Editor:** Change "**see 6.1.4**" into "**see 6.1.2**" in table 62.

Table 62—MLME-SYNC-LOSS.indication parameters *(continued)*

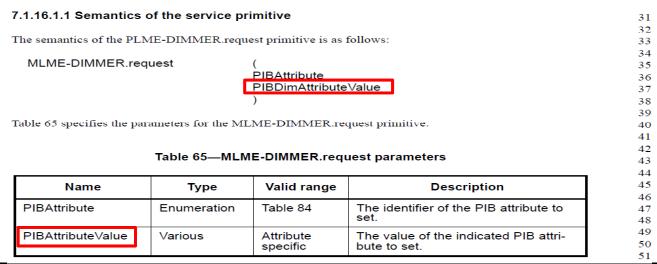| Name	Type	Valid range	Description
LogicalChannel	Integer	Selected from the available logical channels supported by the PHY (see 6.1.4).	The logical channel on which the device lost synchronization or to which it was realigned.

Technical comment CID 628

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy		
628	David Cypher	7	7.1.16.1.1	129	33	Is this a PHY or MAC layer primitive?	Change PLME to MLME	Sridhar_2	

❖ Accept

❖ It's typo

❖ TE: change "PLME" into "MLME" 33 line in page 129.

7.1.16.1.1 Semantics of the service primitive   31
                                                                                      32
The semantics of the PLME-DIMMER.request primitive is as follows: 33
                                                                                      34
    MLME-DIMMER.request   (35
                                           PIBAttribute   36
                                           PIBDimAttributeValue   37
)   38
                                                                                      39
Table 65 specifies the parameters for the MLME-DIMMER.request primitive.   40

Technical comment CID 629

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy		
629	David Cypher	7	7.1.16.1.1	129	37	Is this going to use the existing SET primitives and PIB or is it going to create yet another PIB for dimming only?	Remove DIM in name	Sridhar_2	

❖ Accept:

I think it's typo.

❖ TE: change "PIBDIMAttributeValue" into "PIBAttributeValue" line 37, page 129

7.1.16.1.1 Semantics of the service primitive

The semantics of the PLME-DIMMER.request primitive is as follows:

MLME-DIMMER.request   (
PIBAttribute
PIBDimAttributeValue
)

Table 65 specifies the parameters for the MLME-DIMMER.request primitive.

Table 65—MLME-DIMMER.request parameters

Name	Type	Valid range	Description
PIBAttribute	Enumeration	Table 84	The identifier of the PIB attribute to set.
PIBAttributeValue	Various	Attribute specific	The value of the indicated PIB attribute to set.

Technical comment CID 630

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy		
630	David Cypher	7	7.1.16.1.1	129	48	Change table 84 to 85 for access to macDIM element	Change table 84 to 85	Sridhar_2	

❖ table 84 (page 162) is MAC sublayer constants and table 85 (page 164) is MAC PIB attributes. Table 65 need to be referred PIB attribute. (below).

❖ So suggested Remedy: **Accept**

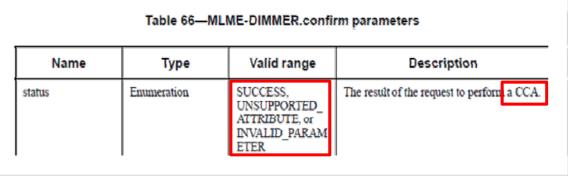❖ **TE:** change "**Table 84**" into "**Table 85**" in the table 65, page 129

Table 65—MLME-DIMMER.request parameters

Name	Type	Valid range	Description
PIBAttribute	Enumeration	Table 84	The identifier of the PIB attribute to set.
PIBAttributeValue	Various	Attribute specific	The value of the indicated PIB attribute to set.

Technical comment CID 633, 636

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy		
633	David Cypher	7	7.1.16.2.1	130	31	Table 66 is wrong apparently a very bad copy paste mistake.	Remove all enumerations but SUCCESS and replace "a CCA" with dimming.	Sridhar _2	
636	R. Roberts	7.1.16.2.1	Table 66	130		Reference to CCA	Remove CCA and replace to "dimming function"	Sridhar_2	

- ❖ There some mistake at "Valid range" and "Description" in Table 66 like comments.
- ❖ In subclause 6.2.2.10.2 When generated, there's only one status, it's SUCCESS.
- ❖ This table is for MLME-DIMMER.confirm paramters not CCA.
- ❖ **So Suggested Remedy : Accept in principle.**
- ❖ **TE**: 1. Change "**SUCCESS, UNSUPPORTED_ATTRIBUTE, or INVALID_PARAMETER**" into "**SUCCESS**" in Valid range, Table 66.
- ❖ 2. Change "**a CCA**" into "dimming function" in description, table 66.

Table 66—MLME-DIMMER.confirm parameters

Name	Type	Valid range	Description
status	Enumeration	SUCCESS, UNSUPPORTED_ ATTRIBUTE, or INVALID_PARAM ETER	The result of the request to perform a CCA.

Technical comment CID 668 (1/2)

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy		
668	David Cypher	7	7.2.3.2.1	145	18	Bits are not in order	Move to end of table	Sridhar	

❖ Aggregate channels and guard channel (8*n) is not good place in the middle of table.

❖ **So suggested remedy is: Accept**

❖ **Please replace table 72 with new table one. (Next Page, Slide 14)**

   ⊞ move "Band Capabilities" to end of the table.

   ⊞ move two columns "aggregate channels" and "guard channels" to end of the table.

Table 72—Capability Information Field

	Bit	Function
	27-31	Reserved
Band capabilities	8*n	Aggregate channels
	8*n	Guard channels
	32-39	Bands used for CSK (any 3 bits of the bits set to 1 can be used)
Physical device capabilities	40-42	Number of optical source types
	43-45	Multiple direction support
	46-55	Number of LEDs per optical source type

Technical comment CID 668 (2/2)

Table 72-Capability Information Field

	Bit	Function
MAC layer capabilities	0	Power source
	1-2	Battery information
	3	Security capability
	4	Co-ordinator capability
	5	Traffic support
	6-7	Topology support
	8-9	Device type
	10	Beacon support
	11	Dimming support in MAC
	12	Continuous visibility transmission (for infrastructure)
	13-15	Reserved
PHY layer capabilities	16	PHY I support
	17	PHY II support
	18	Alternate PHY (CSK) support
	19	Dimming support in PHY (VPM)
	20-22	Max supported TX clock
	23-25	Max supported RX clock
	26	Explicit clock notification request
	27-31	Reserved
Physical device capabilities	32-34	Number of optical source types
	35-37	Multiple direction support
	38-47	Number of LEDs per optical source type
Band capabilities	48-56	Bands used for CSK (any 3 bits of the bits set to 1 can be used)
	8*n	Aggregate channels
	8*n	Guard channels

Technical comment CID 674

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy		
674	David Cypher	7	7.2.3.2.1	147	4	Names are not the same	number of LED per optical sources	Sridhar	they might not be LEDS but agree in principle … use LEDs or LDs.

❖ Not match with the text and table 72

❖ **So suggested remedy is: Accept**

❖ **TE:**

❖ Change "The number of LEDs per optical sources types" in table 72 and "The number of optical sources per type" in line 5, page 147 into "**Number of optical sources per optical source type**"

Table 72—Capability Information Field

	Bit	Function
Physical device capabilities	40-42	Number of optical source types
	43-45	Multiple direction support
	46-55	Number of LEDs per optical source type

The number of optical sources per type is 10 bits in length. It indicates the maximum number of optical sources per optical source type. If it is greater than 1023, 1023 shall be used.   4
5

Technical comment CID 675

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy		
675	David Cypher	7	7.2.3.2.1	147	33	Names are not the same	bands used for CSK	Sridhar	

- ❖ Not match with the text and table 72
- ❖ **So suggested remedy is: Accept**
- ❖ **TE:**
- ❖ Change "the band use of CSK" into "Bands used for CSK" in 33 line, page 147.

Table 72—Capability Information Field

	Bit	Function
Band capabilities	8*n	Aggregate channels
	8*n	Guard channels
	32-39	Bands used for CSK (any 3 bits of the bits set to 1 can be used)

The band use of CSK subfield is 8 bits in length. Bit 7 is reserved. Bits 0-6 map to the bits corresponding to the bandplan. Only 3 bits shall be set to indicate CSK usage. If the device supports more colors and wants to change the CSK usage, it needs to send the capabilities information again with the new bitmap.

33
34
35

Technical comment CID 766

CID	Name	Clau se	Subclaus e	Page	Line	Comment	SuggestedRemedy		
766	David Cypher	7	7.6.2.3	181	38	If the acting as coordinator, What?	Reposition closing), "… (i.e., the WPANCoordinator) parameter is set to TRUE, then the MAC …"	Sridha r	

❖ The sentence is not correct.

> If the acting as the coordinator (i.e., the WPANCoordinator parameter is set to TRUE), the MAC sublayer   38
> shall ignore the StartTime parameter and begin beacon transmissions immediately. Setting the StartTime   39

❖ There is some mistake from DO draft to D1 draft.

❖ In D0 draft , there is almost same sentence except first, the first sentence started with "If the FFD is the coordinator".

❖ **So suggested remedy is: Accept in Principle.**

❖ **TE:**

❖ Change "If the acting as coordinator", into "**For the coordinator**" in line 38 page 181.