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

Submission Title: Resolution for CID 583, 597,606, 624, 662, 677,678
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Re: []

Abstract: comment and resolution

Purpose: Contribution to IEEE 802.15.7 TG-VLC

CID 583 (Subclause 7.1.3.1.1, page 76, line 32)

Comment

- The is no CoordWPANId in table 36, so is it to be deleted here or added there?

Suggested Remedy

- Fix inconsistency

Resolution/instruction to editor

- Accept
- Instruction to editor: insert next following information in table 36 about CoordWPANId.
- Name : CoordWPANId
- Type : Integer
- Valid range : 0x0000–0xffff
- Description: : The WPAN identifier of the coordinator as specified in the received beacon frame.

CID 597 (Subclause 7.1, page 107, line 14)
CID 606 (Subclause 7.1, page 109, line 31)

Comment

- the description in red color must be resolved.

Suggested Remedy

Resolution/instruction to editor

- Accept
- In page 107 and 109, there is a sentence "[channel page is not defined in section 6]".
- It came from table 59 in page 116.
- It is from 802.15.4 document in table 47 page 78.
- Instruction to editor: delete red color sentence in page 107 and 109. and delete "(see 6.1.4)" in table 59 page 116.

Table 47—MLME-ASSOCIATE.request parameters

Name	Type	Valid range	Description
LogicalChannel	Integer	Selected from the available logical channels supported by the PHY (see 6.1.2).	The logical channel on which to attempt association.
ChannelPage	Integer	Selected from the available channel pages supported by the PHY (see 6.1.2).	The channel page on which to attempt association.

6.1.2.2 Channel pages

A total of 32 channel pages are available with channel pages 3 to 31 being reserved for future use. The *phyPagesSupported* PHY PAN information base (PIB) attribute indicates which channel pages are supported by the current PHY, while the *phyCurrentPage* PHY PIB attribute identifies the channel page that is currently used. The PHY PIB attributes are described in 6.4.2.

If the requested PHY PIB attribute is the *phyCurrentPage*, the attribute was successfully set to a different value from the current value, and the channel is no longer valid, then the PHY shall also set the *phyCurrentChannel* to the lowest valid channel for the requested page.

The channel pages and associated channel numbers are shown in Table 2.

CID 624 (Subclause 7.1.14.3, page 123, line 7)

Comment

- Why is this subclause not part of 7.1.14.1.4? It has nothing to do with MLME-SYNC-LOSS

Suggested Remedy

- Move to 7.1.14.1.4

Resolution/instruction to editor

- Accept
- 7.1.14.3(Message sequence chart for synchronizing with a coordinator) is related with synchronizing
- 7.1.14.1 is MLME-SYNC.request
- Instruction to editor: move 7.1.14.3 to 7.1.14.1.4

CID 662 (Subclause 7.2.3.2 , page 144, line 19)

Comment

- If there is only one octet, then how can one have all of the bits listed in Table 72?

Suggested Remedy

- Unknown

Resolution/instruction to editor

- Accept
- In figure 79, Capability Information Field length is 1 octets.
- In Table 72—Capability Information Field, length is 56 bits.
- Instruction to editor: change Capability Information Field length from 1 to 8 in table 72

CID 662 (Subclause 7.2.3.2 , page 144, line 19)

octets: 1	1
Capability Information Field	Aggregation Bitmap Field

Figure 79—Capabilities IE

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

Table 72—Capability Information Field

	Bit	Function
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
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

CID 678 (Subclause 7.2.3.3 , page 148)

Comment

- This section is redundant with section 6.9.4.1.

Suggested Remedy

- I'd suggest that 6.9.4.1 be removed and keep the material here.

Resolution/instruction to editor

- Accept
- Instruction to editor: delete following sentence in 6.9.4.1
- "CQI is communicated to another device using the CQI Information Element. CQI value to be sent in the Information Element may be an average value across a number of packets."
- delete following sentence in 7.2.3.3
- "The CQI measurement is a characterization of the strength and/or quality of a received packet. The measurement may be implemented using receiver ED, a signal-to-noise ratio estimation, or a combination of these methods. The use of the CQI result, by the network or application layers, is not specified in this standard. The CQI measurement shall be performed for each received packet. The minimum and maximum CQI values (0x00 and 0xff) should be associated with the lowest and highest quality IEEE 802.15.7 signals detectable by the receiver, and CQI values in between should be uniformly distributed between these two limits. At least eight unique values of CQI shall be used. CQI value shall indicate the band plan ID, as given by the value in the PHY header of the received packet. A single CQI value set consists of band plan ID and corresponding CQI value.

CID 678 (Subclause 7.2.3.3 , page 148)

6.9.4.1 OOK and VPM

The CQI measurement is a characterization of the strength and/or quality of a received packet. The measurement may be implemented using receiver ED, a signal-to-noise ratio estimation, or a combination of these methods. The use of the CQI result by the network or application layers is not specified in this standard. The CQI measurement shall be performed for each received packet, and the result shall be reported to the MAC sublayer using PD-DATA.indication (see x.x.x.x) as an integer ranging from 0x00 to 0xff. The minimum and maximum CQI values (0x00 and 0xff) should be associated with the lowest and highest quality IEEE 802.15.7 signals detectable by the receiver, and CQI values in between should be uniformly distributed between these two limits. At least eight unique values of CQI shall be used. CQI value shall indicate the band plan ID, as given by the value in the PHY header of the received packet. A single CQI value set consists of band plan ID and corresponding CQI value as shown below.

CQI is communicated to another device using the CQI Information Element. CQI value to be sent in the Information Element may be an average value across a number of packets.

7.2.3.3 Color Quality Indicator IE

The CQI measurement is a characterization of the strength and/or quality of a received packet. The measurement may be implemented using receiver ED, a signal-to-noise ratio estimation, or a combination of these methods. The use of the CQI result, by the network or application layers, is not specified in this standard. The CQI measurement shall be performed for each received packet. The minimum and maximum CQI values (0x00 and 0xff) should be associated with the lowest and highest quality IEEE 802.15.7 signals detectable by the receiver, and CQI values in between should be uniformly distributed between these two limits. At least eight unique values of CQI shall be used. CQI value shall indicate the band plan ID, as given by the value in the PHY header of the received packet. A single CQI value set consists of band plan ID and corresponding CQI value. CQI is communicated to another device using the CQI Information Element. CQI value to be sent in the Information Element may be an average value across a number of packets, and CQI value sets for a number of band plan ID's can be reported using the CQI information element as shown in Table 77.

CID 678 (Subclause 7.2.3.3 , page 148)

Comment

- Confusing column name

Suggested Remedy

- The heading for column 1 is Band Plan ID ⋯ is this the same as the " proposed code" in table 1? If so we need to be consistent and change the name in table 1.

Resolution/instruction to editor

- Accept

- Band plan ID and code is same.

- Instruction to editor: change word from "band plan ID" to "code" in 7.2.3.3.(line 19, 20 and 29)