**IEEE P802.15**

**Wireless Personal Area Networks**

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| --- | --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title | **Proposed resolution of SRM related CID for the LB158** | |
| Date Submitted | [12 September, 2019] | |
| Source | [] [Muroran IT, Landis+Gyr] [Hokkaido Japan, Alpharetta, GA USA] | Voice: [ ] Fax: [ ] E-mail: [kitazawa@ieee.org,  {ruben.salazar, chris.hett, hidetoshi.yokota}@landisgyr.com] |
| Re: |  | |
| Abstract | [SRM related comment resolution for the P802.15.4-REVd-D03.] | |
| Purpose | [] | |
| Notice | This document has been prepared to assist the IEEE P802.15. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. | |
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**Proposed resolution of SRM related CID for the 802.15.4md D03**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 132 | Sub-clause | 6.17 | Line | 16 |
| Comment | I suspect this sentence fragment is supposed to be a sub-bullett for the above items but not sure. | | | | |
| Proposed Change | Either fix the sentence or make it a sub bullet | | | | |

Resolution: Accept

Comment:

Memo: This sentence is sub-bullet in the IEEE 802.15.4s-2018.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 138 | Sub-clause | 6.17.1.2 | Line | Figure 6-79 |
| Comment | Section 6.17.1.2 Figure 6-79 This figure does not seem to have anything to do with maxTxFailTime. I think this is wrong figure. Replace with correct figure. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept

Comments: D01 Figure 6-79 is a right figure.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 139 | Sub-clause | 6.17.1.3 | Line | Figure 6-80 |
| Comment | Section 6.17.1.3 Figure 6-80 Figure is bitmap, and is not searchable. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept

Comments: Provide original figure to the Editor.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 141 | Sub-clause | 6.17.1.4 | Line | Figure 6-81 |
| Comment | Section 6.17.1.4 Figure 6-81 Figure is bitmap, and is not searchable. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept

Comments: Provide original figure to the Editor.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 142 | Sub-clause | 6.17.1.5 | Line | Figure 6-82 |
| Comment | Section 6.17.1.5 Figure 6-82 Figure is bitmap, and is not searchable. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept

Comments: Provide original figure to the Editor.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 152 | Sub-clause | 6.17.1.6 | Line | Figure 6-83 |
| Comment | Section 6.17.1.6 Figure 6-83 Figure is bitmap, and is not searchable. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept

Comments: Provide original figure to the Editor.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 153 | Sub-clause | 6.17.1.7 | Line | Figure 6-84 |
| Comment | Section 6.17.1.7 Figure 6-84 Figure is bitmap, and is not searchable. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept

Comments: Provide original figure to the Editor.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 162 | Sub-clause | 6.17.2.5 | Line | 11 |
| Comment | "Figure 6-88" There is no Figure 6-88. | | | | |
| Proposed Change |  | | | | |

Resolution: Revised

Comments: Insert “SRM Information flow with waiting for Acknowledgment” figure as a Figure 6-88.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 164 | Sub-clause | 6.17.1.9 | Line | Table 6-6 |
| Comment | Section 6.17.1.9 Table 6-6 The last line says "?55 < IPI", but I think it is supposed to say "IPI > -55". | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept.

Comments: Provide revised figure to the Editor.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 172 | Sub-clause | 6.17.2.3 | Line | Figure 6-85 |
| Comment | Section 6.17.2.3 Figure 6-85 The figure has some font issues, where dashes go over the E of the MLME etc. It also has some arrows in red, and some text is in red too without any reason for color. Fix the figure. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept

Comments: Provide revised figure to the Editor.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 173 | Sub-clause | 6.17.2.3 | Line | Figure 6-86 |
| Comment | Section 6.17.2.3 Figure 6-86 The figure has some font issues, where dashes go over the E of the MLME etc. It also has some arrows in red, and some text is in red too without any reason for color. Fix the figure. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept

Comments: Provide revised figure to the Editor.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 174 | Sub-clause | 6.17.2.4 | Line | Figure 6-87 |
| Comment | Section 6.17.2.4 line 7 The figure 6-87 is missing, as the current Figure 6-87 should really be 6-88 as it is about SRM Infrmation Notification, not about SRM Report. Add the missing figure. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept

Comments: D01 has right figure in Section 6.17.2.4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 177 | Sub-clause | 6.17.2.5 | Line | Figure 6-87 |
| Comment | Section 6.17.2.5 Figure 6-87 The figure does not need to have "(AckedConfirm=TRUE/FALSE)" text at all, as that parameter does not affect the resulting flow chart. This figure also has some font issues iwth MLME-SRM-INFORMATION parts. Remove the "(AckedConfirm=TRUE/FALSE)" and fix fonts. Also this is really a figure 6-88, and figure 6-87 is missing. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept

Comments: Provide revised figure to the Editor.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 194 | Sub-clause | 7.4.2.17 | Line | Figure 7-46 |
| Comment | Section 7.4.2.17 Figure 7-46 The figure is in bitmap form and is not searchable. Convert to proper figure. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept

Comments: Provide original figure to the Editor.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 217 | Sub-clause | 7.5.26 | Line | 21, 26 |
| Comment | "Figure 7-141" underline with no link.  "Figure 7-142" underline and there is no "Figure 7-142" at link page. | | | | |
| Proposed Change |  | | | | |

Resolution: Accept

Comments: Cross reference issue will be fixed generation of next version draft.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 218 | Sub-clause | 7.5.26 | Line | Figure 7-141 |
| Comment | Section 7.5.26 Figure 7-141 Figure is missing header at all. Add "Figure 7-141 -- SRM Request command Content field Format" for the figure heading. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revise



**Figure 7-141 – SRM Request command Content field Format**

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 230 | Sub-clause | 7.5.26 | Line | Figure 7-141 |
| Comment | Section 7.5.26 Figure 7-141 Figure heading is above figure, when it should be below it. Move the heading to correct place. Also this should be figure 7-142, as Figure 7-141 should be the SRM Request command Content field figure, which does not have heading. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revised

Replace p. 275, below l.1, with the following:

****

**Figure 7-142 – Measurement Information field**

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 232 | Sub-clause | 7.5.26 | Line | Table 7-96 |
| Comment | Section 7.5.26 line 9 There is no Table 7-96, Fix the reference, or add the table. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revise

Change l.9 to the following:

The Start Time, which shall be formatted as described in Figure 7-99, indicates the time at which the

measurement is started.

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 75 | Sub-clause | 5.7.7 | Line | 18 |
| Comment | Document says: "Full measurement: the device conducts the measurement for a specified duration of time regardless of the channel." This statement is strange and liekly incomplete. | | | | |
| Proposed Change | The TSCH MAC allows the devices to stay in a channel for a defined period of time. If the duration of time for this request is bigger than the slot duration then the channel must change: what is supposed to happen to this request? Should it continue on the same channel or to jump to and through the channels according to the TSCH scheme? If it stays on the same channel, what is being measured? If it jumps, what is the meaning and value of the measurement? The document could say: "Full measurement: the device conducts the measurement for a specified duration of time follwing the channel sequence as necessary" or some more explicit statement | | | | |

Resolution: Revised.

Change the statement as follows:

Full measurement: the device conducts the measurement for a specified duration of time following the channel sequence as necessary.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 160 | Sub-clause | 6.17.1.8 | Line | Table 8-108 |
| Comment | Section 6.17.1.8 line 16 The text here says values are 0x00 and 0xff as shown in Table 8-108 and Table 8-108 for macRssi refers back to here in 6.17.1.8. I.e., what does the actual value 0x00 or 0xff mean? Add text explaining what the values actually mean. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revised.

[Current]

Subclause 6.17.1.8, Page 168, lines 14-17,

RSSI is a measure of the RF power received as described below. The RF power level at the input of the transceiver measured during the PHR and is valid after the SFD is detected. The minimum and maximum values are 0x00 and 0xff as shown in Table 8-108 and the values in between should be uniformly distributed.

Subclause 8.4.2.9, Page 413, line 1,

**Table 8-108 SRM Specific MAC PIB attributes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| macRssi | Integer | 0x00-0xff | The RF power level at the input of the transceiver. Refer to 6.17.1.8. | - |

[Changed]

RSSI is a measure of the RF power in dBm for the received packet. The RF power level at the input of the transceiver measured during the PHR and is valid after the SFD is detected. RSSI is represented as one octet of integer as shown in Table 8-108; therefore, the minimum and maximum values are -174 dBm (0) and 80 dBm (254), respectively. 255 is reserved. If any measured value less than -174 dBm is rounded up to -174 dBm.

**Table 8-108 SRM Specific MAC PIB attributes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| macRssi | Integer | 0-254 | The RF power level at the input of the transceiver. Refer to 6.17.1.8. | - |

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 135 | Sub-clause | 6.17.1.1 | Line | 22 |
| Comment | Not sure what the ED minimum and maximum are saying. The values from MLME-SCAN.confirm would indicate those should be 0x00 to 0xff | | | | |
| Proposed Change | Investigate and fix or explain what 0x0-0xf mean | | | | |

Resolution: Revised.

[Current]

Subclause 6.17.1.1, Page 164, lines 20-23,

ED capability is included in the fundamental features for PHY technologies as described in 10.2.5. In the

case that SRM capabilities is supported, the scaling of ED data shall abide by the following rule.

— The minimum and maximum values of ED are 0x0 and 0xf, respectively.

This range convers twice the range of 40 dB with the accuracy of 6 dB.

Subclause 8.4.2.9, Page 413, line 1,

**Table 8-108 SRM Specific MAC PIB attributes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| macEd | Integer | 0x0-0xf | The received signal power within the  bandwidth of the channel as defined  10.2.5. Refer to 6.17.1.1. | - |

[Changed]

ED capability is included in the fundamental features for PHY technologies as described in 10.2.5 (Receiver ED). In the case that SRM capabilities is supported, the ED value is represented as one octet of integer and referred to as *macEd* as shown in Table 8-108.

According to the definition in 10.2.5, the measured ED in dBm can be calculated as follows:

*macEd* = Measured ED [dBm] – (the lowest receiver sensitivity [dBm] + *10*).

**Table 8-108 SRM Specific MAC PIB attributes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| macEd | Integer | 0-254 | An estimate of the received signal power within the  bandwidth of the channel as defined  10.2.5. 255 is reserved. | - |

Comments:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 136 | Sub-clause | 6.17.1.1 | Line | 23 |
| Comment | Isn't this information just a rehash of what is stated in 10.2.5? Wondering why we need another copy here. | | | | |
| Proposed Change | Make this a reference if it is not different from what is in 10.2.5. If the line stays, then "convers" is not a word | | | | |

Resolution: Revised.

10.2.5 defined the Receiver ED, but doesn’t define the PIB attribute for it. 6.17.1.1 explains a new attribute “*macED*” for it and describes the relationship between the actual measured ED and this parameter based on the definition of 10.2.5.

Remove the sentence including the typo that was pointed out.

Comments:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 149 | Sub-clause | 6.17.1.7 | Line | 16 |
| Comment | Section 6.17.1.7 line 16, RCPI-ANPI is not a defined acronyn, and this is only use for it, remove "(RCPI-ANPI)", especially as the text before does not even explain that acronym. Or is this trying to say RCPI - ANPI as an expression? | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revised.

“RCPI – ANPI” is an equation and should be written such.

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 220 | Sub-clause | 7.5.26 | Line | Table 8-81 |
| Comment | Section 7.5.26 line 24 Do not combine SrmHandle and SRM Token. Add separate SrmToken to the table 8-81 and change this to refer to SrmToken. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revised.

[Current]

Subclause 7.5.26, p.274, l.24-25,

The SRM Token shall be set to the value in SrmHandle as defined inTable 8-81 of MLME-SRM.request

primitive. The value is unique among SRM Request frames.

[Changed]

[Change#1]

The SRM Token shall be set to the value in SrmToken as defined in Table 8-81 of MLME-SRM.request primitive. SRM Token is a nonzero number that is unique among the SRM Request elements in a particular request primitive.

[Change#2] p.371 l.1,

MLME-SRM.request (

SrmHandle

SrmToken

DeviceAddrMode,

DeviceAddress,

PayloadIeList,

SrmMetricId,

ScopeId,

StartTime,

Duration,

ChannelPage,

ChannelNumber,

LinkHandle,

SecurityLevel,

KeyIdMode,

KeySource,

KeyIndex

)

[Change#3] p.371, l.21,

Add the following in table 8-81 below SrmHandle line:

**Table 8-81MLME-SRM.request parameters**

|  |  |  |  |
| --- | --- | --- | --- |
| SrmToken | Integer | 0x00-0xff | A unique number to identify the SRM request element between the sender and the receiver. |

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 222 | Sub-clause | 7.5.26 | Line | 3 |
| Comment | SRM Duration, according to 7-141, is always present | | | | |
| Proposed Change | Either make SRM Duration in Figure 7-141 a "0/4" or reserve the SRM Duration present bit | | | | |

Resolution: Revised.

Change SRM Duration in Figure 7-141 from “4” to "0/4".

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 223 | Sub-clause | 7.5.26 | Line |  |
| Comment | Section 7.2.26 line 4 If the SRM Duration field is not present, what value is assumed for SRM Duration? | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Reject.

Comments: There are several SRM MAC PIB attributes that do not need those parameters. For example, existing attributes defined in 8.4.26 such as macRetryCount or macFcsErrorCount do not require Duration, Channel Number or Channel Page.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 224 | Sub-clause | 7.5.26 | Line |  |
| Comment | Section 7.2.26 line 6 If the Channel Page field is not present, what value is assumed for Channel Page field? I would guess current channel page would be best. Specify the value when it is not present. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Reject.

Comments: Same as #CID 223.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 226 | Sub-clause | 7.5.26 | Line |  |
| Comment | Section 7.2.26 line 84 If the Channel Number field is not present, what value is assumed for Channel Number field? I would guess current channel number would be best. Specify the value when it is not present. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Reject:

Comments: Same as #CID 223.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 227 | Sub-clause | 7.5.26 | Line |  |
| Comment | Actually this comment applies to lines 9-19. I don't see how Start Time, SRM Duration, Channel Page, Channel Number and Link Handle can be omitted (see 7-141). There is nothing in the primitives for SRM that would indicate how they would be set on the receiving side if omitted in the MAC command | | | | |
| Proposed Change | See comment | | | | |

Resolution: Reject.

When the receiver receives SRM Metric ID, the receiver should know whether the requested SRM Metric ID requires the information in the “Measurement Information” field. If SRM Metric ID requires “Measurement Information” and it is not present, then the request shall be rejected as described in Section 7.5.27.

Comments:

[Change#1] p.276, l.1,

Add name to figure as follow:



**Figure 7-143: SRM Response Command Content**

[Change#2] p.276, l.7,

Change “Figure 7-142” to “Figure 7-144”.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 244 | Sub-clause | 7.5.27 | Line | 5 |
| Comment | Section 7.5.28 line 5 Combing SrmHandle parameter and SRM Token fields is bad idea. Add new parameter SrmToken to MLME-SRM-REPORT and use that for SrmToken, and keep SrmHandle as internal value. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revised.

[Current #1]

Subclause 7.5.28, p.277, l.4-6,

The SRM Token field shall be set to the SRM Token in the corresponding the SRM Request element. If the

SrmHandle defined in Table 8-79 is provided via MLME-SRM-REPORT.request primitive. If the SRM

Report element is being sent autonomously, then the SRM Token is set to 0.

[Changed #1]

The SRM Token field shall be set to the SRM Token in the corresponding the SRM Request element. If the SRM Report element is being sent autonomously, then the SRM Token is set to 0.

[Current #2]

Subclause 7.5.28, p.277, l.16-18;

The SRsM Token field shall be set to the SRM Token in the corresponding the SRM Request element. If the

SrmHandle defined in Table 8-82 is provided via MLME-SRM-INFROMATION.request primitive. If the

SRM Information is being sent autonomously, then the SRM Token is set to 0.

[Changed #2]

The SRM Token field shall be set to the SRM Token in the corresponding the SRM Request element. If the

SRM Information is being sent autonomously, then the SRM Token is set to 0.

Comments:

### 9/16 Updated

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 231 | Sub-clause | 7.5.27 | Line | Figure 7-141 |
| Comment | Section 7.5.27 Figure 7-141 The SRM Duration field length should be 0/4, as it can be omitted by setting SRM Duration Present field to 0. Or if the SRM Duration is mandatory field, then remove SRM Duration Present completely. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revised

Same as CID#222.

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 233 | Sub-clause | 7.5.26 | Line | Table 8-85 |
| Comment | Section 7.5.26 line 19 The Table 8-85 does not describe anything about the Link Handle. Fix the reference to correct location. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revised

[Current]

The Link Handle, which is described in Table 8-85, indicates the link on with the measurement to be

performed.

[Changed]

The Link Handle, which is described in Table 8-81, indicates the link on which the measurement to be

performed.

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 234 | Sub-clause | 7.5.27 | Line | 1 |
| Comment | Section 7.5.27 Figure 7-143 line 1. Havinf field Status inside the MAC command is bad idea, as it can very easily be confused with MLME Status. Rename the "Status" to "SRM Status". | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revised

Change “Status” to “SRM Status” in Figure 7-143 as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Bits:0-5 | 6-7 | Octets:1 | 1 | Octets: variable | 4 |
| SRM  Metric ID | Scope  ID | SRM Token | SRM Status | Measured Device Information | Attribute  Value |

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 235 | Sub-clause | 7.5.27 | Line | 6 |
| Comment | Section 7.5.27 line 6. Having Status field inside the MAC command is bad idea, as it can very easily be confused with MLME Status. Rename the "Status field" to "SRM Status field". | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept

Change “Status” to “SRM Status” in l.6 of p.276 as follows:

The SRM Status field shall be formatted as illustrated in Figure 7-144.



Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 236 | Sub-clause | 7.5.27 | Line | 9 |
| Comment | Section 7.5.27 line 9 There is no Address Mode or Device Address fields. I assume they are supposed to be in the Measured Device Information field, which is not described anywhere. Either remove them, or specify where they are. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revised.

See CID#238.

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 237 | Sub-clause | 7.5.27 | Line | Figure 7-143 |
| Comment | Section 7.5.27 figure 7-143 Figure is missing heading. Add "Figure 7-143 -- SRM Response command Content field format". | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept.

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 238 | Sub-clause | 7.5.27 | Line | Figure 7-143 |
| Comment | Section 7.5.27 Figure 7-143 There is field Measured Device Information, but the contents of that is never described. Add description of that field. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revised.

Add Figure 7-139 in IEEE802.15.4s-2018.

Comments:



**Figure 7-145—Measured Device Information field format**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 239 | Sub-clause | 7.5.27 | Line | Figure 7-143 |
| Comment | Section 7.5.27 Figure 7-143 The attribute Value field cannot be 4 octets long, as there are several attributes which have different length. Some of them are arrays, and lots of them are 1 octet fields. Change from "4" to "variable". | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 240 | Sub-clause | 7.5.28 | Line | Figure 7-143 |
| Comment | Section 7.5.28 Figure 7-143 The attribute Value field cannot be 4 octets long, as there are several attributes which have different length. Some of them are arrays, and lots of them are 1 octet fields. Change from "4" to "variable". | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 241 | Sub-clause | 7.5.27 | Line | Table 7-144 |
| Comment | Section 7.5.27 figure 7-142 header, Having Status field inside the MAC command is bad idea, as it can very easily be confused with MLME Status. Rename the "Status field" to "SRM Status field". This also should be Figure 7-144 instead 7-142. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revised

Change “Status” to “SRM Status” in l.6 of p.276 as follows:

|  |  |
| --- | --- |
| SRM Status | Description |

Figure 7-144— SRM Status field format

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 242 | Sub-clause | 7.5.28 | Line | Table 7-143 |
| Comment | Section 7.5.28 figure 7-143 Figure heading is on the next page. Also the heading claims this is table 7-143, but references to it say it is 7-145. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revised

Change the caption of “Figure 7-143—SRM Report command Content field format” to ““Figure 7-145—SRM Report command Content field format” and put it immediately below the corresponding figure on p.276.

Comments:

### 9/17 Updated

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 221 | Sub-clause | 7.5.26 | Line | 2 |
| Comment | Section 7.2.26 line 2 If the Start Time field is not present, what value is assumed for Start Time field? I would guess value 0 would be best. Specify the value when it is not present. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Reject

If Start Time Present is set to zero, there is no field for SRM Duration (Also see the resolution for CID#222).

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 245 | Sub-clause | 7.5.28 | Line | Figure 7-144 |
| Comment | Section 7.5.29 Figure 7-144 The figure heading claims this is figure 7-144, but the references claim it should be 7-146. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revised.

Add Figure 7-139 in IEEE802.15.4s-2018 as Figure 7-146 (See CID#238).

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 246 | Sub-clause | 7.5.27 | Line | Figure 7-144 |
| Comment | Section 7.5.29 Figure 7-144 The attribute Value field cannot be 4 octets long, as there are several attributes which have different length. Some of them are arrays, and lots of them are 1 octet fields. Change from "4" to "variable". | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Accept.

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 250 | Sub-clause | 8.2.1 | Line |  |
| Comment | Table 8-1 in the SRM related raw, there are no link exact Subclass and no jump to the subclause. | | | | |
| Proposed Change | Correct to exact subclause and link to the subcase. | | | | |

Resolution: Revised

Add a hyperlink to the corresponding subclause.

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 299 | Sub-clause | 8.2.26.1.1 | Line | 14 |
| Comment | Section 8.2.26.1.1 line 14 There should be separate SrmToken parameter here between ScopeId and StartTime. Add it here. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revised

[Change#1]

p.364, l.14, add “SRM Token after :ScopeId” in subclause 8.2.26.1.1.

MLME-SRM-REPORT.request (

SrmHandle,

DeviceAddrMode,

DeviceAddress,

PayloadIeList,

SrmMetricId,

ScopeId,

SRM Token,

StartTime,

Duration,

ChannelPage,

ChannelNumber,

SecurityLevel,

KeyIdMode,

KeySource,

KeyIndex

)

[Change#2] p.365, l.1,

Add the following in Table 8-75 below “ScopeId” line:

**Table 8-75 -- MLME-SRM-REPORT.request parameters**

|  |  |  |  |
| --- | --- | --- | --- |
| SrmToken | Integer | 0x00 | In the case of SRM Report, which has no corresponding request, SRM Token shall be set to zero. |

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 300 | Sub-clause | 8.2.26.1.1 | Line | 18 |
| Comment | Section 8.2.26.1.1 line 18 There is no LinkHandle parameter here, should there be one, as there is field for it in the SRM Report command? | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution: Revised

[Change#1]

p.364, l.14, add “Linkhandle” after “ChannelNumber” in subclause 8.2.26.1.1.

MLME-SRM-REPORT.request (

SrmHandle,

DeviceAddrMode,

DeviceAddress,

PayloadIeList,

SrmMetricId,

ScopeId,

StartTime,

Duration,

ChannelPage,

ChannelNumber,

LinkHandle,

SecurityLevel,

KeyIdMode,

KeySource,

KeyIndex

)

[Change#2] p.365, l.1,

Add the following in Table 8-75 below “ChannelNumber” line:

**Table 8-75 -- MLME-SRM-REPORT.request parameters**

|  |  |  |  |
| --- | --- | --- | --- |
| LinkHandle | Integer | 0x0000-0xffff | The identifier of Link specified by  *macLinkHandle* in Table 8-98. If Link  is not used, *LinkHandle* shall be set  to 0xffff. |

Comments:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 303 | Sub-clause | 8.2.26.1.1 | Line | Table 8-75 |
| Comment | Section 8.2.26.1.1 Table 8-75 There should be separate SrmToken parameter here between ScopeId and StartTime. Add it here with type if Integer, and Valid Range of 0x01-0xff, and description "Srm Token when sending SRM Report command". | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 304 | Sub-clause | 8.2.26.1.1 | Line | Table 8-75 |
| Comment | Section 8.2.26.1.1 Table 8-75 StartTime field can be omitted from the SRM Report command. Which value of StartTime parameter indicates that this parameter is omitted? Value 0? This applies also to other SRM MLME calls. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 305 | Sub-clause | 8.2.26.1.1 | Line | Table 8-75 |
| Comment | Section 8.2.26.1.1 Table 8-75 Duration field can be omitted from the SRM Report command. Which value of Duration parameter indicates that this parameter is omitted? Value 0? This applies also to other SRM MLME calls. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 306 | Sub-clause | 8.2.26.1.1 | Line | Table 8-75 |
| Comment | Section 8.2.26.1.1 Table 8-75 Channel Page field can be omitted from the SRM Report command. Which value of ChannelPage parameter indicates that this parameter is omitted? This applies also to other SRM MLME calls. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 307 | Sub-clause | 8.2.26.1.1 | Line | Table 8-75 |
| Comment | Section 8.2.26.1.1 Table 8-75 Channel Number field can be omitted from the SRM Report command. Which value of ChannelNumber parameter indicates that this parameter is omitted? This applies also to other SRM MLME calls. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 308 | Sub-clause | 8.2.26.1.1 | Line | Table 8-75 |
| Comment | Section 8.2.26.1.1 Table 8-75 I assume the SrmMetricId is used to fetch the correct measurement from the PIB and that value is then filled to the Attribute Value field of the command. If that is true, this should be explained either here or in the description of the MLME call. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 311 | Sub-clause | 8.2.26.1.2 | Line | 7 |
| Comment | Section 8.2.26.1.2 line 7 There should be separate SrmToken parameter here between ScopeId and StartTime. Add it here. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 312 | Sub-clause | 8.2.26.1.2 | Line | 11 |
| Comment | Section 8.2.26.1.2 line 11 There is no LinkHandle parameter here, should there be one, as there is field for it in the SRM Report command? Also we do not have parameter for Attribute Value from the incoming command should we have it? | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 314 | Sub-clause | 8.2.26.1.2 | Line | Table 8-76 |
| Comment | Section 8.2.26.1.2 Table 8-76 There should be separate SrmToken parameter here between ScopeId and StartTime. Add it here with type if Integer, and Valid Range of 0x01-0xffm and description "Srm Token of the received SRM Report command". | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 315 | Sub-clause | 8.2.26.1.2 | Line | Table 8-76 |
| Comment | Section 8.2.26.1.2 Table 8-76 If the Start Time field is missing from the SRM Report, what value is used for StartTime parameter? | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 316 | Sub-clause | 8.2.26.1.2 | Line | Table 8-76 |
| Comment | Section 8.2.26.1.2 Table 8-76 If the SRM Duration field is missing from the SRM Report, what value is used for Duration parameter? | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 317 | Sub-clause | 8.2.26.1.2 | Line | Table 8-76 |
| Comment | Section 8.2.26.1.2 Table 8-76 If the Channel Page field is missing from the SRM Report, what value is used for ChannelPage parameter? | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 318 | Sub-clause | 8.2.26.1.2 | Line | Table 8-76 |
| Comment | Section 8.2.26.1.2 Table 8-76 If the Channel Number field is missing from the SRM Report, what value is used for ChannelNumber parameter? | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 319 | Sub-clause | 8.2.26.2.1 | Line | 8 |
| Comment | Section 8.2.26.2.1 line 8 There should be separate SrmToken parameter here between ScopeId and StartTime. Add it here. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 320 | Sub-clause | 8.2.26.2.1 | Line | 12 |
| Comment | Section 8.2.26.2.1 line 12 There is no LinkHandle parameter here, should there be one, as there is field for it in the SRM Information command? | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 321 | Sub-clause | 8.2.26.2.1 | Line | Table 8-78 |
| Comment | Section 8.2.26.2.1 Table 8-78 I assume the SrmMetricId is used to fetch the correct measurement from the PIB and that value is then filled to the Attribute Value field of the command. If that is true, this should be explained either here or in the description of the MLME call. | | | | |
| Proposed Change | As specified in comment | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 322 | Sub-clause | 8.2.26.2.2 | Line |  |
| Comment | Section 8.2.26.2.2 line 12 Why does not the .indication contain all the information from the SRM Information command, i.e., SRM Metric ID, Scope ID, SRM Token, Measurement Information and Attribute value? | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 324 | Sub-clause | 8.2.26.3 | Line | 18 |
| Comment | Section 8.2.26.3 line 18 I think this should be MLME-SRM-REQ.request not MLME-SRM.request. At least Figure 6-85 assumes so. Change "MLME-SRM.request" to "MLME-SRM-REQ.request". Also add new "8.2.26.3 MLME-SRM-REQ", and move 8.2.26.3.1 MLME-SRM-REQ.request (old 8.2.26.3 MLME-SRM.request), 8.2.26.3.2 MLME-SRM-REQ.indication (old 8.2.26.4 MLME-SRM.indication) and 8.2.26.3.3 MLME-SRM-REQ.confirm (old 8.2.26.6 MLME-SRM-REQ.confirm) under it. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 326 | Sub-clause | 8.2.26.3 | Line | 8 |
| Comment | Section 8.2.26.3 line 8 There should be separate SrmToken parameter here between ScopeId and StartTime. Add it here. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 332 | Sub-clause | 8.2.26.4 | Line | 8 |
| Comment | Section 8.2.26.4 line 8 There is no corresponding response primitive, so SrmHandle is no longer useful, remove it. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 333 | Sub-clause | 8.2.26.4 | Line | 11 |
| Comment | Section 8.2.26.4 line 11 There should be separate SrmToken parameter here between ScopeId and StartTime. Add it here. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 335 | Sub-clause | 8.2.26.3 | Line | Table 8-81 |
| Comment | Section 8.2.26.3 Table 8-81 There should be separate SrmToken parameter here between ScopeId and StartTime. Add it here with type if Integer, and Valid Range of 0x01-0xff, and description "Srm Token when sending SRM Report command". | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 338 | Sub-clause | 8.2.26.4 | Line | 5 |
| Comment | Section 8.2.26.4 line 5 There is no longer corresponding Response, so SrmHandle is not useful at all for matching them. Use SrmToken for that instead along with the addresses. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 339 | Sub-clause | 8.2.26.4 | Line | Table 8-82 |
| Comment | Section 8.2.26.4 Table 8-82 There is no corresponding response primitive, so SrmHandle is no longer useful, remove it. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 341 | Sub-clause | 8.2.26.5 | Line | 11 |
| Comment | Section 8.2.26.5 line 11 We do not have parameter for Attribute Value to be used when sending response. Should we have it, or do we automatically fetch it based on the SrmMetricId? | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 345 | Sub-clause | 8.2.26.5 | Line | Table 8-83 |
| Comment | Section 8.2.26.5 line 10 There should be all parameters from needed for SRM Response command, i.e., add SrmMetricId, ScopeId, SrmToken, SrmStatus, StartTime, Duration, ChannelPage, ChannelNumber and LinkHandle. Also add them to the Table 8-83. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 346 | Sub-clause | 8.2.26.5 | Line | Table 8-83 |
| Comment | Section 8.2.26.5 Table 8-83 Description of the SrmHandle is wrong. It is not used to match SRM Response with the corresponding SRM Response, but it is used to match the MLME-SRM-RES.request with corresponding MLME-SRM-RES.confirm. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 349 | Sub-clause | 8.2.26.5.1 | Line | Table 8-84 |
| Comment | Section 8.2.26.5.1 line 8 There is no need for SrmHandle, as there is no corresponding response. Remove it. On the other hand we would need other fields from the SRM Response commands, i.e., SrmMetricId, ScopeId, SrmToken, StartTime. Duration, ChannelPage, ChannelNumber, LinkHandle, and AttributeValue. We do have SrmStatus. Add all those to Table 8-84 too. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 350 | Sub-clause | 8.2.26.5.2 | Line | Table 8-85 |
| Comment | Section 8.2.26.5.2 line 6 There is no need for DeviceAddrMode or DeviceAddress as SrmHandle will uniquely specify the corresponding response, as SrmToken is separated to its own field. Remove DeviceAddrMode and DeviceAddress from here, and also from Table 8-85. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 352 | Sub-clause | 8.2.26.6 | Line | Table 8-86 |
| Comment | Section 8.2.26.6 line 7 There is no need for DeviceAddrMode or DeviceAddress as SrmHandle will uniquely specify the corresponding response, as SrmToken is separated to its own field. Remove DeviceAddrMode and DeviceAddress from here, and also from Table 8-86. The Status in parameter list is in the beginning of the line, it is not correctly indented. Fix that too. | | | | |
| Proposed Change |  | | | | |

Resolution:

Comment:

Memo:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | 494 | Sub-clause | 7.4.4.1 | Line |  |
| Comment | In Table 7-19, thick borderline between 0x25 and 0x26 and row of "0x46 SRM" is not correct. | | | | |
| Proposed Change | Line width between 0x25 and 0x26 become thick to normal.  Correct Format subclause and Use description at SRM IE raw. | | | | |

Resolution: Revised

Correction this matter next revision.

Comment: